

STUDY REPORT
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**COHORT PACKAGE REPLACEMENT
SYSTEM ANALYSIS FOR
INFANTRY/FIELD ARTILLERY/ARMOR
(COPRS IN/FA/AR) STUDY**

**VOLUME II -
APPENDIX D: C - REM USER'S MANUAL**

JULY 1987



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**PREPARED BY
FORCE SYSTEMS DIRECTORATE**

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| <p>Volume I of the COPRS Study is the basic study report. It describes the COHORT Replacement Model (C-REM) and sample COHORT replacement packages for select infantry, field artillery and armor units. C-REM is a BASIC model. It has the capability to simulate an MOS in a unit and determine COHORT package replacement sizes, NCO strength, total monthly strength by grade, and COHORT replacements at the battalion level.</p> <p>Volume II of the COPRS Study is the COHORT Replacement Model (C-REM) User's Guide. This volume describes the C-REM Model, how to use it, and the code for each module of the model. The model, as coded, must be compiled on the IBM BASIC Compiler to run properly.</p> | | | | | |
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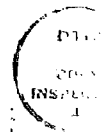
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COHORT PACKAGE REPLACEMENT SYSTEM ANALYSIS FOR
INFANTRY/FIELD ARTILLERY/ARMOR (COPRS IN/FA/AR) STUDY

VOLUME II - APPENDIX D: C-REM USER'S MANUAL

July 1987



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APPENDIX D

COHORT REPLACEMENT MODEL (C-REM) USER'S MANUAL

D-1. PREFACE. The primary objective of C-REM is to determine average sizes of Cohesion, Operational Readiness, and Training (COHORT) replacement packages for first-term soldiers assigned to companies/batteries in either the FORSCOM or European theaters. The user has the option to control the length of the time intervals between COHORT package replacements. The model is capable of playing 3, 4, or 5 companies per battalion. To allow for computation of battalion COHORT replacement packages, either 3-, 4-, or 6-month time intervals must be used. The model will play any other interval; however, the battalion package output is forfeited. The user also has the capability of determining NCO replacements over various replacement intervals. The user can have the model create the initial force or supply the model with a current company personnel profile.

D-2. THE MODEL. C-REM is a BASIC program designed to run on an IBM PC-AT or compatible machine (DOS 3.10). The model consists of four main modules: C-REM, BUILD, FORSCOM, and EUROPE. The code for these modules is in Annexes I-IV, respectively. *Keywords: manuals, computer program*

a. C-REM. The sole purpose of the C-REM module is to link the user with either the BUILD, FORSCOM, or EUROPE module. By calling C-REM, the screen will appear as shown in Figure D-1, giving a brief description of the overall C-REM model. Pressing any key then displays the screen, Figure D-2, which prompts the user to determine how the model is to be executed. The user has the option of creating a company personnel profile (option "C"), or modeling a FORSCOM (option "F") or a European (option "E") company/battery or battalion. The reason for having both the FORSCOM module and the EUROPE module is that the personnel policies for FORSCOM and EUROPE are different.

```

THE PURPOSE OF THIS PROGRAM IS TO DETERMINE THE SIZES OF COHORT
REPLACEMENT PACKAGES OVER VARIOUS REPLACEMENT INTERVALS FOR
FIRST TERM SOLDIERS ASSIGNED TO COMPANIES/BATTERYS IN EITHER FORSCOM
OR EUROPE  IN ADDITION TO FIRST TERM SOLDIERS, YOU HAVE THE OPTION
TO DETERMINE NCO REPLACEMENTS OVER VARIOUS REPLACEMENT INTERVALS
YOU CAN ALSO INPUT A CURRENT UNIT'S PERSONNEL PROFILE IF YOU DESIRE

THIS PROGRAM CAN PRODUCE FOUR DIFFERENT PRINTOUTS

1  CO/BTRY COHORT PKG SIZES
2  BATTALION COHORT PKG SIZES (OPTIONAL)
3  NCO STRENGTH (OPTIONAL)
4  MONTHLY STRENGTH BY GRADE (OPTIONAL)

PRESS ANY KEY TO CONTINUE

```

Figure D-1. C-REM Sample 1

DO YOU WANT TO INPUT DATA FOR A FORSCOM OR EUROPEAN TYPE UNIT
OR DO YOU WANT TO INPUT A CURRENT UNIT'S PROFILE ?

ENTER *F* FOR FORSCOM , *E* FOR EUROPE OR *C* TO INPUT A PROFILE.

Figure D-2. C-REM Sample 2

b. **Build.** The BUILD module is called by the C-REM module when the user chooses Option "C" from the main menu. The purpose of this module is to allow the user to create a file of a current company/battery personnel profile, which can then be used again and again. BUILD prompts the user as to whether a FORSCOM or EUROPEAN company/battery profile is going to be entered.

(1) **FORSCOM Unit.** BUILD will allow a FORSCOM company/battery to be input by choosing the "F" option. For first-term soldiers in FORSCOM, the length of the soldier's initial enlistment contract and the soldier's time remaining in the service (both in months) are the only two inputs required by C-REM. For NCOs, the only input required by C-REM is the NCO's time remaining in the company/battery to which the NCO is assigned. The BUILD module prompts the user for all these inputs.

(2) **EUROPEAN Unit.** BUILD will allow a EUROPEAN company/battery to be input by choosing the "E" option. For first-term soldiers in a EUROPEAN company, the length of the soldier's initial enlistment contract and the soldier's time remaining in the service (both in months) are two of the three inputs required. The third input required is the soldier's time remaining in the company/battery to which the soldier is assigned. This third input is required to determine whether or not a soldier is eligible to return back to CONUS as well as for promotions. For NCOs, the only input required is the NCO's time remaining in the company/battery to which the NCO is assigned. The BUILD module prompts the user for all of these inputs.

(3) **Other Inputs.** Figure D-3 shows the only other inputs required by the BUILD module. These inputs are required when inputting data for either a FORSCOM or a EUROPEAN unit. The user inputs this data immediately after choosing to input a FORSCOM or EUROPEAN unit and is then prompted for the individual first-term and NCO data. All of the inputs will then be saved on the disk in a file named by the user.


```

ENTER THE TOTAL FIRST TERMERS, E1 - E4
ENTER THE TOTAL NUMBER OF    E5s
ENTER THE TOTAL NUMBER OF    E6s
ENTER THE TOTAL NUMBER OF    E7s
ENTER THE DATA FILE NAME

```

Figure D-3. BUILD Sample

(4) **Outputs.** Upon completion of the company/battery personnel profile, the user then has the option of getting a hard copy of the company/battery profile just created. The user can then create another company/battery personnel profile or return to the C-REM module to use either the FORSCOM or EUROPE module with the company/battery personnel profile or newly created profiles.

c. **FORSCOM.** The FORSCOM module is called by the C-REM module when the "F" option is chosen from the main menu. The purpose of this module is to simulate a CONUS company/battery life span under a fixed station concept. The module takes into consideration unprogramed attritions, promotions, normal losses, reassignments, and reenlistments. All of these transactions are controlled by rates that are input by the user. The inputs required for the FORSCOM module are discussed below. The outputs of the FORSCOM module are identical to the outputs of the EUROPE module and will be discussed in paragraph D-3.

(1) **FORSCOM Inputs.** The FORSCOM module is extremely flexible because all variables are input by the user. However, to achieve this flexibility, the user is prompted for a large number of inputs. The user is initially prompted for a filename to which these inputs will be saved on disk. Once an input file is created, the user can then have the module load this data without having to type individual inputs. If this is done, the user has the option to change any or all of the inputs and to save the changes under a new filename or the same file name. Since many of the inputs are relatively stable, it is recommended that if only a few changes are desired, the user should load an existing file into memory, make the desired changes, and then save the data in a new file. This also enables the user to play the "what if" game by making minor changes to the inputs, executing the simulation, and then repeating the process to analyze the affect of the changes. Among the inputs are authorized strengths for first-termers and NCOs. The user has the option of having either an initial force as 100 percent of the authorized strength or the user can supply an initial force based on a current company personnel profile created in the BUILD module. With either choice, the force is initially loaded. At the first time period specified by the input for the number of the month

for first-term replacements and NCO replacements, the company/battery is filled to 100 percent of authorized strength. The company/battery continues receiving replacements in equally spaced intervals based on these inputs. The user is prompted for all of these inputs and is expected to be familiar with current FORSCOM personnel policies and the structure of FORSCOM companies/batteries. If the user is familiar with these, all of the inputs will be self-explanatory.

(2) **Control.** To control the execution of this module and the life span of a company/battery, the user must also input the number of months to be simulated and the number of repetitions to be executed. It is recommended that the number of months to be simulated be at least 72. Also, the number of repetitions should be at least 30 for the results to be statistically significant. For example, if the number of months simulated is 72 and the number of repetitions is 30, then the module will execute the simulation 30 times with a company life span of 72 months and will be statistically significant. Output data from simulations that are less than 30 repetitions should not be considered since statistically they may be in error.

d. **EUROPE.** The EUROPE module is called by the C-REM module when the "E" option is chosen from the main menu. The purpose of this module is to simulate an OCONUS company/battery life span under a fixed station concept. The module takes into consideration unprogramed attritions, promotions, normal losses, reassignments, and reenlistments. All of these transactions are controlled by rates that are input by the user. The inputs that are required for the EUROPE module are discussed below. The outputs of the EUROPE module will be discussed in conjunction with the output of the FORSCOM module in paragraph D-3. The EUROPE module is very similar to the FORSCOM module with the exception of reassignments, which must be treated differently due to differing personnel policies. The EUROPE module also considers 3-year and 4-year enlistments, variable enlistments, and marital status, where as the FORSCOM module does not consider marital status.

(1) **EUROPE Inputs.** The EUROPE module is also extremely flexible, and the user is prompted for a large number of inputs. As with the FORSCOM module, the user is initially prompted for a filename to which these inputs will be saved. The user then has the same options as the FORSCOM module as discussed in paragraph D-2c(1). For example, the user can play the "what if..." game as in the FORSCOM module. The primary distinction between EUROPE inputs and FORSCOM inputs is that the EUROPE module requires more variables to be input. The first additional input is the percentage of initial fill a company/battery will have. The reason for this input is that initially the user may want to overfill the company since replacements for first-termers and NCOs do not arrive until month 12. The remaining additional inputs are concerned with marital status and all-others tours for NCOs. The user is prompted for all of these inputs and is expected to be familiar with current EUROPEAN personnel policies and the structure of EUROPEAN companies/batteries. If the user is familiar with these, all of the inputs will be self-explanatory.

(2) **Control.** The same control variables, as discussed in paragraph D-2c(2) for the FORSCOM module, are input to control the simulation of the EUROPE module. Also, the same recommendations for the number of months to simulate and the number of repetitions to ensure statistical significance are identical for the EUROPE module.

D-3. MODEL OUTPUTS. The same outputs are available when running either the FORSCOM module or the EUROPE module. There are five output reports available, the last three of which are optional. The three optional reports are a listing of battalion COHORT package sizes, NCO strengths, and monthly strengths by grade. The input variables and the company/battery COHORT package sizes report are generated automatically. The user is prompted regarding the three optional reports.

a. The first report is a listing of the input variables which drive the simulation. Figure D-4 is a sample report of the inputs supplied to the EUROPE module when simulating life cycles of an OCONUS 13B battery. Figure D-5 is a sample report of the inputs supplied to the FORSCOM module when simulating life cycles for a 13B battery in CONUS. The differences are due to the differing personnel policies in the FORSCOM and EUROPE modules.

b. The next report is also generated automatically. This report lists, in 4-month intervals, the average company/battery package size, a 90 percent confidence interval, the standard deviation, and the percent of the company/battery strength based on the number of repetitions supplied by the user. Figure D-6 is a sample report of the company first-termers COHORT replacement packages for a 13B OCONUS battery.

c. The first optional report available is a report of the battalion first-termers COHORT replacement packages. This report lists the average package sizes for each company/battery in the battalion, a 90 percent confidence interval, the standard deviation, and the average percent of company/battery strength every 4 months. The averages, confidence interval, and the standard deviation are all based on the number of repetitions input by the user. This output report is only available when the user is simulating a battalion consisting of 3, 4, or 5 companies/batteries. Figure D-7 is a sample report of a 13B OCONUS battalion.

d. The second optional report is the listing in 4-month intervals of the minimum NCO strengths by grade before replacements. Figure D-8 is a sample minimum NCO strength before replacements report for a 13B OCONUS battery.

e. The third optional output report is a monthly listing of the company/battery strength by grade. This report also lists the percentage of strength for the total company/battalion and for NCO strength. Figure D-9 is a sample monthly report for a 13B OCONUS battery.

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USAEUR ---- FIELD ARTILLERY BATTERY (155 SP) J SERIES TOE

THE OUTPUT WAS DERIVED FROM THE INPUT DATA LISTED BELOW.

A--TOTAL 1ST TERMERS IN THE UNIT----- 53
 EXPECTED PERCENT OF FILL-- 100
 B--EXPECTED PERCENTAGE OF VEL SOLDIERS----- 0
 C--EXPECTED LENGTH OF A VEL CONTRACT IN MONTHS----- 0
 D--THE TOTAL PERCENTAGE OF SOLDIERS EXPECTED FOR JET-- 20
 E--THE PERCENTAGE EXPECTED FOR 3 YR JET ENLISTMENTS-- 70
 REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR JET ENLISTEES-- 30
 F--THE TOUR LENGTH FOR JET SOLDIERS IN MONTHS--- 36
 G--THE PERCENTAGE OF SOLDIERS THAT ARE EXPECTED TO
 EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT
 JET SOLDIERS ----- 2
 UNACCOMPANIED SOLDIERS ----- 4
 H--EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS----- 70
 REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR ENLISTEES-- 30
 I--THE TOUR FOR UNACCOMPANIED SOLDIERS IN MONTHS--- 24
 J--EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS
 THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT-- 4
 K--THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA
 AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:
 K--UNACCOMPANIED 1st TERMERS--- 6
 L--THE AVERAGE LENGTH IN MONTHS--- 12
 M--JET SOLDIERS--- 2
 N--THE AVERAGE LENGTH IN MONTHS--- 12
 O--EXPECTED PROMOTION MONTH TO E5----- 28
 P--EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5----- 3.7
 Q--THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT----- 1
 R--THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS----- 4
 S--THE NUMBER OF MONTHS SIMULATED----- 180
 T--THE NUMBER OF REPETITIONS----- 30
 U--MONTHLY LISTING OF UNIT STRENGTH-- YES
 V--BATTALION TOTALS FOR REPLACEMENTS-- YES
 COMPANIES IN THE BATTALION IS-- 4

NCO DATA *****

A--NUMBER OF AUTHORIZED E5s--- 16
 B--THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS--- 36
 C--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s--- .5
 D--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6--- .5
 E--NUMBER OF AUTHORIZED E6s--- 10
 F--THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS--- 36
 G--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s--- .2
 H--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7--- .3
 I--NUMBER OF AUTHORIZED E7s--- 4
 J--THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS--- 36
 K--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s--- .2
 L--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8--- .2
 M--THE EXPECTED PERCENTAGE OF NCOs THAT WILL CHOOSE AN
 ALL OTHERS TOUR RATHER THAN AN ACCOMPANIED TOUR----- 25
 N--THE LENGTH OF AN ALL OTHERS TOUR----- 24
 O--THE EXPECTED PERCENT OF INITIAL NCO FILL-- 90
 P--THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S
 LIFETIME FOR:
 P-- E5s -- 100
 Q-- E6s -- 100
 R-- E7s -- 100
 S--THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA
 AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:
 S--THE EXPECTED PERCENT OF NCO EXTENSIONS-- 4
 T--THE AVERAGE LENGTH IN MONTHS-- 12
 U--THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS--- 4
 V--THE MONTH TO START NCO REPLACEMENTS--- 24

Figure D-4. Sample Report of EUROPE Inputs

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FORSCOM ---- FIELD ARTILLERY BATTERY (155 SP) J SERIES TOE

THE OUTPUT WAS DERIVED FROM THE INPUT DATA LISTED BELOW.

A--TOTAL 1ST TERMERS IN THE UNIT----- 53
 B--EXPECTED PERCENTAGE OF VEL SOLDIERS----- 0
 C--EXPECTED LENGTH OF A VEL CONTRACT IN MONTHS----- 0
 D--EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS----- 70
 E--EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS
 THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT-- 3
 F--PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA----- 5
 G--EXPECTED PROMOTION MONTH TO E5----- 28
 H--EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5----- 3.5
 I--THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT----- 1
 J--THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS ----- 4
 K--THE MINIMUM TIME IN MONTHS THAT A SOLDIER
 MUST BE IN THE UNIT TO BE ELIGIBLE TO BE REASSIGNED----- 24
 L--THE MINIMUM TIME IN MONTHS THAT A SOLDIER
 MUST HAVE REMAINING IN THE SERVICE TO BE REASSIGNED----- 12
 M--THE EXPECTED MONTHLY PERCENTAGE OF REASSIGNMENTS----- 4
 N--THE NUMBER OF MONTHS SIMULATED----- 180
 O--THE NUMBER OF REPETITIONS----- 30
 P--MONTHLY LISTING OF UNIT STRENGTH----- YES
 Q--BATTALION TOTALS FOR REPLACEMENTS----- YES
 NUMBER OF COMPANIES IN THE BATTALION IS----- 4

NCO DATA *****

A--NUMBER OF AUTHORIZED E5s--- 16
 B--THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS--- 30
 C--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s--- .5
 D--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6--- .5
 E--NUMBER OF AUTHORIZED E6s--- 10
 F--THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS--- 42
 G--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s--- .2
 H--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7--- .3
 I--NUMBER OF AUTHORIZED E7s--- 4
 J--EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS--- 48
 K--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s--- .2
 L--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8--- .2
 M--THE EXPECTED PERCENT OF INITIAL NCO FILL--- 90
 ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S
 LIFETIME FOR:
 N--E5s --- 100
 O--E6s --- 100
 P--E7s --- 100
 Q--THE MONTH TO START NCO REPLACEMENTS--- 24
 R--THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS--- 4

Figure D-5. Sample Report of FORSCOM Inputs

COMPANY FIRST TERMER COHORT REPLACEMENT PACKAGES

| MONTH | AVG PKG SIZE | 90% CONFIDENCE INTERVAL | | STD DEV | % UNIT STR |
|-------|-----------------|-------------------------|--------------|---------|------------|
| | | LOWER BOUNDS | UPPER BOUNDS | | |
| 12 | 6 | 5.6 | 6.9 | 0.4 | 88.7 |
| 16 | 2 | 1.5 | 2.5 | 0.3 | 96.2 |
| 20 | 2 | 1.6 | 2.3 | 0.2 | 96.2 |
| 24 | 4 | 2.9 | 4.1 | 0.3 | 92.5 |
| 28 | 7 | 6.5 | 8.1 | 0.5 | 86.8 |
| 32 | 24 | 23.0 | 24.7 | 0.5 | 54.7 |
| 36 | 3 | 3.0 | 3.9 | 0.3 | 94.3 |
| 40 | 4 | 3.0 | 4.2 | 0.4 | 92.5 |
| 44 | 13 | 12.3 | 13.9 | 0.5 | 75.5 |
| 48 | 4 | 3.4 | 4.6 | 0.4 | 92.5 |
| 52 | 5 | 4.1 | 5.3 | 0.4 | 90.6 |
| 56 | 8 | 7.5 | 9.4 | 0.6 | 84.9 |
| 60 | 7 | 6.1 | 7.6 | 0.5 | 86.8 |
| 64 | 12 | 10.7 | 12.7 | 0.6 | 77.4 |
| 68 | 7 | 6.4 | 7.5 | 0.3 | 86.8 |
| 72 | 6 | 5.4 | 6.7 | 0.4 | 88.7 |
| 76 | 9 | 8.3 | 9.8 | 0.4 | 83.0 |
| 80 | 7 | 6.1 | 7.7 | 0.5 | 86.8 |
| 84 | 6 | 5.1 | 6.3 | 0.3 | 88.7 |
| 88 | 9 | 8.0 | 9.6 | 0.5 | 83.0 |
| 92 | 7 | 6.5 | 8.2 | 0.5 | 86.8 |
| 96 | 9 | 8.4 | 9.8 | 0.4 | 83.0 |
| 100 | 8 | 7.6 | 9.1 | 0.5 | 84.9 |
| 104 | 7 | 6.1 | 7.5 | 0.4 | 86.8 |
| 108 | 8 | 7.1 | 8.8 | 0.5 | 84.9 |
| 112 | 7 | 6.6 | 8.2 | 0.5 | 86.8 |
| 116 | 7 | 6.5 | 7.9 | 0.4 | 86.8 |
| 120 | 8 | 7.2 | 9.1 | 0.6 | 84.9 |
| 124 | 2 | 7.2 | 8.5 | 0.4 | 84.9 |
| 128 | 7 | 6.5 | 8.0 | 0.5 | 86.8 |
| 132 | 8 | 7.2 | 8.9 | 0.5 | 84.9 |
| 136 | 7 | 6.3 | 7.9 | 0.5 | 86.8 |
| 140 | 8 | 6.8 | 8.3 | 0.4 | 84.9 |
| 144 | 8 | 7.0 | 8.1 | 0.3 | 84.9 |
| 148 | 7 | 6.5 | 7.8 | 0.4 | 86.8 |
| 152 | 8 | 7.5 | 8.8 | 0.4 | 84.9 |
| 156 | 9 | 7.4 | 8.9 | 0.4 | 84.9 |
| 160 | 7 | 6.5 | 8.1 | 0.5 | 86.8 |
| 164 | 8 | 7.7 | 9.3 | 0.5 | 84.9 |
| 168 | 9 | 6.9 | 8.4 | 0.5 | 84.9 |
| 172 | 7 | 6.7 | 8.0 | 0.4 | 86.8 |
| 176 | 8 | 6.7 | 8.3 | 0.5 | 84.9 |
| 180 | 8 | 7.1 | 8.5 | 0.4 | 84.9 |

Figure D-6. Sample Company/Battery First-termers
Package Report

BATTALION FIRST TERMER COHORT REPLACEMENT PACKAGES

| MONTH | CO | PKG SIZE | 90% CONFIDENCE INTERVAL | | STD DEV | % UNIT STR |
|-------|----|----------|-------------------------|---------|---------|------------|
| | | | LOWER B | UPPER B | | |
| 12 | A | 6 | 5.6 | 6.9 | 0.4 | 88.7 |
| 16 | A | 2 | 1.5 | 2.5 | 0.3 | 96.2 |
| 20 | A | 2 | 1.6 | 2.3 | 0.2 | 96.2 |
| 24 | A | 4 | 2.9 | 4.1 | 0.2 | 92.5 |
| | B | 6 | 5.6 | 6.9 | 0.4 | 88.7 |
| | | ----- | | | | |
| | | 10 | | | | |
| 28 | A | 7 | 6.5 | 8.1 | 0.5 | 86.8 |
| | B | 2 | 1.5 | 2.5 | 0.3 | 96.2 |
| | | ----- | | | | |
| | | 9 | | | | |
| 32 | A | 24 | 23.0 | 24.7 | 0.5 | 54.7 |
| | B | 2 | 1.6 | 2.3 | 0.2 | 96.2 |
| | | ----- | | | | |
| | | 26 | | | | |
| 36 | A | 3 | 3.0 | 3.9 | 0.3 | 94.3 |
| | B | 4 | 2.9 | 4.1 | 0.3 | 92.5 |
| | C | 6 | 5.6 | 6.9 | 0.4 | 88.7 |
| | | ----- | | | | |
| | | 13 | | | | |
| 40 | A | 4 | 3.0 | 4.2 | 0.4 | 92.5 |
| | B | 7 | 6.5 | 8.1 | 0.5 | 86.8 |
| | C | 2 | 1.5 | 2.5 | 0.3 | 96.2 |
| | | ----- | | | | |
| | | 13 | | | | |
| 44 | A | 13 | 12.3 | 13.9 | 0.5 | 75.5 |
| | B | 24 | 23.0 | 24.7 | 0.5 | 54.7 |
| | C | 2 | 1.6 | 2.3 | 0.2 | 96.2 |
| | | ----- | | | | |
| | | 39 | | | | |
| 48 | A | 4 | 3.4 | 4.6 | 0.4 | 92.5 |
| | B | 3 | 3.0 | 3.9 | 0.3 | 94.3 |
| | C | 4 | 2.9 | 4.1 | 0.3 | 92.5 |
| | D | 6 | 5.6 | 6.9 | 0.4 | 88.7 |
| | | ----- | | | | |
| | | 17 | | | | |
| 52 | A | 5 | 4.1 | 5.3 | 0.4 | 90.6 |
| | B | 4 | 3.0 | 4.2 | 0.4 | 92.5 |
| | C | 7 | 6.5 | 8.1 | 0.5 | 86.8 |
| | D | 2 | 1.5 | 2.5 | 0.3 | 96.2 |
| | | ----- | | | | |
| | | 19 | | | | |

Figure D-7. Sample Battalion First-termer COHORT Replacement Packages Report

MINIMUM NCO STRENGTH BEFORE REPLACEMENTS

| MONTH | E5 STR | E6 STR | E7 STR |
|-------|--------|--------|--------|
| 12 | 12 | 9 | 4 |
| 16 | 12 | 9 | 4 |
| 20 | 11 | 9 | 4 |
| 24 | 13 | 9 | 4 |
| 28 | 22* | 10 | 4 |
| 32 | 18* | 11* | 5* |
| 36 | 16 | 9 | 4 |
| 40 | 18* | 10 | 4 |
| 44 | 11 | 10 | 5* |
| 48 | 8 | 4 | 1 |
| 52 | 16 | 10 | 4 |
| 56 | 16 | 10 | 4 |
| 60 | 16 | 9 | 4 |
| 64 | 15 | 10 | 4 |
| 68 | 14 | 10 | 4 |
| 72 | 14 | 8 | 3 |
| 76 | 14 | 9 | 4 |
| 80 | 13 | 10 | 4 |
| 84 | 12 | 6 | 2 |
| 88 | 15 | 10 | 4 |
| 92 | 16 | 10 | 4 |
| 96 | 15 | 9 | 4 |
| 100 | 15 | 10 | 4 |
| 104 | 14 | 10 | 4 |
| 108 | 14 | 8 | 3 |
| 112 | 14 | 9 | 4 |
| 116 | 14 | 9 | 4 |
| 120 | 13 | 7 | 2 |
| 124 | 14 | 10 | 4 |
| 128 | 15 | 10 | 4 |
| 132 | 15 | 9 | 4 |
| 136 | 15 | 9 | 4 |
| 140 | 14 | 10 | 4 |
| 144 | 13 | 8 | 3 |
| 148 | 14 | 9 | 4 |
| 152 | 14 | 9 | 4 |
| 156 | 14 | 7 | 3 |
| 160 | 14 | 10 | 4 |
| 164 | 15 | 10 | 4 |
| 168 | 14 | 9 | 4 |
| 172 | 14 | 9 | 4 |
| 176 | 14 | 9 | 4 |
| 180 | 14 | 3 | 3 |

* ---- INDICATES OVERSTRENGTH

Figure D-8. Sample NCO Strength Report

MONTHLY UNIT STRENGTH BY GRADE

| MONTH | E1-4 | E5s | E6s | E7s | % UNIT STR/NCO STR |
|-------|------|-----|-----|-----|--------------------|
| 1 | 52 | 14 | 9 | 4 | 95.2 / 90.0 |
| 2 | 52 | 14 | 9 | 4 | 95.2 / 90.0 |
| 3 | 51 | 14 | 9 | 4 | 94.0 / 90.0 |
| 4 | 51 | 13 | 9 | 4 | 92.8 / 86.7 |
| 5 | 50 | 13 | 9 | 4 | 91.6 / 86.7 |
| 6 | 50 | 13 | 9 | 4 | 91.6 / 86.7 |
| 7 | 50 | 13 | 9 | 4 | 91.6 / 86.7 |
| 8 | 49 | 13 | 9 | 4 | 91.6 / 86.7 |
| 9 | 49 | 13 | 9 | 4 | 90.4 / 86.7 |
| 10 | 48 | 13 | 9 | 4 | 89.2 / 86.7 |
| 11 | 47 | 13 | 9 | 4 | 88.0 / 86.7 |
| 12 | 53 | 12 | 9 | 4 | 94.0 / 83.3 |
| 13 | 53 | 12 | 9 | 4 | 94.0 / 83.3 |
| 14 | 52 | 12 | 9 | 4 | 92.8 / 83.3 |
| 15 | 52 | 12 | 9 | 4 | 92.8 / 83.3 |
| 16 | 53 | 12 | 9 | 4 | 94.0 / 83.3 |
| 17 | 52 | 12 | 9 | 4 | 92.8 / 83.3 |
| 18 | 52 | 12 | 9 | 4 | 92.8 / 83.3 |
| 19 | 51 | 12 | 9 | 4 | 91.6 / 83.3 |
| 20 | 53 | 11 | 9 | 4 | 92.8 / 80.0 |
| 21 | 52 | 11 | 9 | 4 | 91.6 / 80.0 |
| 22 | 52 | 11 | 9 | 4 | 91.6 / 80.0 |
| 23 | 52 | 11 | 9 | 4 | 91.6 / 80.0 |
| 24 | 53 | 16 | 10 | 4 | 100.0 / 100.0 |
| 25 | 51 | 18* | 10 | 4 | 100.0 / 106.7 |
| 26 | 49 | 19* | 10 | 4 | 98.8 / 110.0 |
| 27 | 48 | 20* | 10 | 4 | 98.8 / 113.3 |
| 28 | 53 | 22* | 11* | 5* | 109.6 / 126.7 |
| 29 | 52 | 23* | 11* | 5* | 109.6 / 130.0 |
| 30 | 50 | 23* | 11* | 5* | 107.2 / 130.0 |
| 31 | 49 | 25* | 11* | 5* | 108.4 / 136.7 |
| 32 | 53 | 18* | 11* | 5* | 104.8 / 113.3 |
| 33 | 52 | 18* | 11* | 5* | 103.6 / 113.3 |
| 34 | 52 | 18* | 11* | 5* | 103.6 / 113.3 |
| 35 | 51 | 18* | 11* | 5* | 102.4 / 113.3 |
| 36 | 53 | 17* | 10 | 4 | 101.2 / 103.3 |
| 37 | 52 | 17* | 10 | 4 | 100.0 / 103.3 |
| 38 | 51 | 18* | 10 | 4 | 100.0 / 106.7 |
| 39 | 51 | 18* | 10 | 4 | 100.0 / 106.7 |
| 40 | 53 | 18* | 11* | 4 | 103.6 / 110.0 |
| 41 | 52 | 19* | 11* | 5* | 103.6 / 113.3 |
| 42 | 51 | 19* | 11* | 5* | 103.6 / 116.7 |
| 43 | 50 | 19* | 11* | 5* | 102.4 / 116.7 |
| 44 | 53 | 16 | 10 | 5* | 101.2 / 103.3 |
| 45 | 53 | 16 | 11* | 5* | 102.4 / 106.7 |
| 46 | 52 | 16 | 11* | 5* | 101.2 / 106.7 |
| 47 | 51 | 16 | 11* | 5* | 100.0 / 106.7 |
| 48 | 53 | 16 | 10 | 4 | 100.0 / 100.0 |
| 49 | 53 | 16 | 10 | 4 | 100.0 / 100.0 |
| 50 | 52 | 16 | 10 | 4 | 98.8 / 100.0 |
| 51 | 51 | 16 | 10 | 4 | 97.6 / 100.0 |
| 52 | 53 | 16 | 10 | 4 | 100.0 / 100.0 |
| 53 | 52 | 16 | 10 | 4 | 98.8 / 100.0 |
| 54 | 52 | 17* | 10 | 4 | 100.0 / 103.3 |
| 55 | 51 | 17* | 10 | 4 | 98.8 / 103.3 |

Figure D-9. Sample Monthly Strength by Grade Report

ANNEX I TO APPENDIX D

C-REM MODULE

CAA-SR-87-18

(NOT USED)

```

*10 CLS:PRINT:PRINT
20 PRINT "THE PURPOSE OF THIS PROGRAM IS TO DETERMINE THE SIZES OF COHORT"
30 PRINT
40 PRINT "REPLACEMENT PACKAGES OVER VARIOUS REPLACEMENT INTERVALS FOR"
50 PRINT
60 PRINT "FIRST TERM SOLDIERS ASSIGNED TO COMPANIES/BATTERYS IN EITHER FORSCOM"
70 PRINT
80 PRINT "OR EUROPE. IN ADDITION TO FIRST TERM SOLDIERS, YOU HAVE THE OPTION"
90 PRINT
100 PRINT "TO DETERMINE NCO REPLACEMENTS OVER VARIOUS REPLACEMENT INTERVALS "
110 PRINT
120 PRINT "YOU CAN ALSO INPUT A CURRENT UNIT'S PERSONNEL PROFILE IF YOU DESIRE."

130 PRINT
140 PRINT "          THIS PROGRAM CAN PRODUCE FOUR DIFFERENT PRINTOUTS."
150 PRINT
160 PRINT"          1. CO/BTRY COHORT PKG SIZES
170 PRINT
180 PRINT"          2. BATTALION COHORT PKG SIZES (OPTIONAL)
190 PRINT
200 PRINT"          3. NCO STRENGTH (OPTIONAL)
210 PRINT
220 PRINT"          4. MONTHLY STRENGTH BY GRADE (OPTIONAL)
230 PRINT:PRINT"PRESS ANY KEY TO CONTINUE"
240 FFF$=INKEY$:IF FFF$="" THEN 340
250 CLS
260 PRINT:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT
270 PRINT "DO YOU WANT TO INPUT DATA FOR A FORSCOM OR EUROPEAN TYPE UNIT "
280 PRINT:PRINT "OR DO YOU WANT TO INPUT A CURRENT UNIT'S PROFILE ?"
290 LOCATE 15,10
300 PRINT "ENTER *F* FOR FORSCOM , *E* FOR EUROPE OR *C* TO INPUT A PROFILE."
310 FFF$=INPUT$(1)
320 IF FFF$="C" OR FFF$="c" THEN GOTO 370 ELSE 330
330 IF FFF$="F" OR FFF$="f" THEN GOTO 350 ELSE 340
340 IF FFF$="E" OR FFF$="e" THEN GOTO 360 ELSE BEEP:GOTO 250
350 RUN "FORSCOM"
360 RUN "EUROPE"
370 RUN "BUILD"

```

ANNEX II TO APPENDIX D

BUILD MODULE

(NOT USED)

```

10 CLS
20 LOCATE 10,10
30 PRINT "IS THIS UNIT PROFILE FOR A FORSCOM OR A EUROPEAN UNIT ?"
40 LOCATE 15,15
50 PRINT "TYPE *F* FOR CONUS OR *E* FOR OCONUS"
60 T$=INPUT$(1)
70 IF T$="F" OR T$="f" THEN 90 ELSE 80
80 IF T$="E" OR T$="e" THEN 90 ELSE BEEP:GOTO 10
90 CLS
100 INPUT "ENTER THE TOTAL FIRST TERMERS, E1 - E4 ",FT
110 DIM UFOR (FT,4)
120 INPUT "ENTER THE TOTAL NUMBER OF E5s ",F5
130 DIM UE5 (F5,3)
140 INPUT "ENTER THE TOTAL NUMBER OF E6s ",F6
150 DIM UE6 (F6,3)
160 INPUT "ENTER THE TOTAL NUMBER OF E7s ",F7
170 DIM UE7 (F7,3)
180 INPUT "ENTER THE DATA FILE NAME ",A$
190 OPEN A$ FOR OUTPUT AS #1
200 PRINT #1,FT
210 PRINT #1,F5
220 PRINT #1,F6
230 PRINT #1,F7
240 FOR T=1 TO FT
250 CLS
260 PRINT #1,T
270 PRINT:PRINT:PRINT:PRINT"GRADE E1 - E4 SOLDIERS, SOLDIER # "T
280 PRINT:PRINT
290 IF T$="F" OR T$="f" THEN 320
300 INPUT "TIME REMAINING IN THE COMPANY IN MONTHS ",A
310 PRINT #1,A
320 PRINT:PRINT
330 INPUT "ENTER THE LENGTH OF THE SOLDIERS INITIAL ENLISTMENT CONTRACT ".B
340 PRINT #1,B
350 PRINT:PRINT
360 INPUT "ENTER THE TIME REMAINING IN SERVICE IN MONTHS ",AA
370 PRINT #1,AA
380 NEXT T
390 PRINT #1,99
400 BEEP
410 FOR T=1 TO F5
420 CLS
430 PRINT #1,T
440 PRINT:PRINT:PRINT:PRINT"GRADE E5 SOLDIERS, SOLDIER # "T
450 PRINT:PRINT
460 INPUT "TIME REMAINING IN THE COMPANY IN MONTHS ",A
470 PRINT #1,A
480 NEXT T
490 PRINT #1,99:BEEP
500 FOR T=1 TO F6
510 CLS
520 PRINT #1,T
530 PRINT:PRINT:PRINT:PRINT"GRADE E6 SOLDIERS, SOLDIER # "T
540 PRINT:PRINT
550 INPUT "TIME REMAINING IN THE COMPANY IN MONTHS ",A
560 PRINT #1,A
570 NEXT T
580 PRINT #1,99:BEEP
590 FOR T=1 TO F7
600 CLS

```

```

610 PRINT #1,T
620 PRINT:PRINT:PRINT:PRINT"GRADE E7 SOLDIERS, SOLDIER # "T
630 PRINT:PRINT
640 INPUT "TIME REMAINING IN THE COMPANY IN MONTHS ",A
650 PRINT #1,A
660 NEXT T
670 CLOSE
680 CLS
690 LOCATE 10,10
700 PRINT "DO YOU WANT A PRINTOUT OF THE DATA ENTERED ?"
710 LOCATE 15,15
720 PRINT "ENTER * Y * FOR YES, * N * FOR NO."
730 X$=INPUT$(1)
740 IF X$="n" OR X$="N" THEN 1510
750 IF X$="y" OR X$="Y" THEN 760 ELSE 680
760 OPEN "I",#1,A$
770 INPUT #1,FT
780 INPUT #1,F5
790 INPUT #1,F6
800 INPUT #1,F7
810 FOR T=1 TO FT+1
820 IF T$="F" OR T$="f" THEN AA=3 ELSE AA=4
830 FOR TT = 1 TO AA
840 IF EOF(1) THEN CLOSE:GOTO 900
850 INPUT #1,A
860 IF A=99 GOTO 900
870 UFOR(T,TT) = A
880 NEXT TT
890 NEXT T
900 FOR T=1 TO F5+1
910 FOR TT = 1 TO 2
920 IF EOF(1) THEN CLOSE:GOTO 980
930 INPUT #1,A
940 IF A=99 GOTO 980
950 UES(T,TT) = A
960 NEXT TT
970 NEXT T
980 FOR T=1 TO F6+1
990 FOR TT = 1 TO 2
1000 IF EOF(1) THEN CLOSE:GOTO 1060
1010 INPUT #1,A
1020 IF A=99 GOTO 1060
1030 UES(T,TT) = A
1040 NEXT TT
1050 NEXT T
1060 FOR T=1 TO F7
1070 FOR TT = 1 TO 2
1080 IF EOF(1) THEN CLOSE:GOTO 1140
1090 INPUT #1,A
1100 IF A=99 GOTO 1140
1110 UET(T,TT) = A
1120 NEXT TT
1130 NEXT T
1140 REM
1150 LPRINT "ID NO          TIME LEFT      SVC CONTRACT  TIME REMAINING"
1160 LPRINT "                IN CO              '           IN SERVICE"
1170 LPRINT
1180 LPRINT "                FIRST TERMERS E1 - E4"
1190 FOR I = 1 TO FT
1200 IF T$="C" OR T$="c" THEN 1230

```



```

1210 LPRINT UPQR(I,1),UPQR(I,2),UPQR(I,3),UPQR(I,4)
1220 GOTO 1240
1230 LPRINT UPQR(I,1),UPQR(I,2),UPQR(I,3)
1240 NEXT I
1250 LPRINT:LPRINT:LPRINT "      GRADE E5"
1260 FOR I = 1 TO F5
1270 LPRINT UE5(I,1),UE5(I,2)
1280 NEXT I
1290 LPRINT:LPRINT:LPRINT "      GRADE E6"
1300 FOR I = 1 TO F6
1310 LPRINT UE6(I,1),UE6(I,2)
1320 NEXT I
1330 LPRINT:LPRINT:LPRINT "      GRADE E7"
1340 FOR I = 1 TO F7
1350 LPRINT UE7(I,1),UE7(I,2)
1360 NEXT I
1370 LPRINT:LPRINT "IF YOU WANT TO MAKE CORRECTIONS TO "A1" YOU WILL HAVE"
1380 LPRINT "EDIT IT IN DOS."
1390 LPRINT "THE FILE WILL LOOK LIKE THE ONE BELOW. THE 99 IS THE END OF"
1400 LPRINT "EACH GRADE"
1410 LPRINT
1420 LPRINT "4      INDICATES NUMBER OF FIRST TERMERS E1 - E4"
1430 LPRINT "5      INDICATES NUMBER OF E5s"
1440 LPRINT "3      INDICATES NUMBER OF E6s"
1450 LPRINT "4      INDICATES NUMBER OF E7s"
1460 LPRINT "1      FIRST RECORD"
1470 LPRINT "12     TIME LEFT"
1480 LPRINT "1      INDICATES ACCOMPANIED OR UNACCOMPANIED"
1490 LPRINT "21     INDICATES THE TIME REMAINING IN THE UNIT"
1500 LPRINT "99     INDICATES THE END OF THE GRADE BEING ENTERED"
1510 CLOSE
1520 CLS
1530 LOCATE 10,10
1540 PRINT "DO YOU WANT TO CREATE ANOTHER UNIT PROFILE ?"
1550 LOCATE 15,15
1560 PRINT "ENTER * Y * FOR YES, * N * FOR NO "
1570 X$=INPUT$(1)
1580 IF X$="n" OR X$="N" THEN 1610
1590 IF X$="y" OR X$="Y" THEN ERASE UPQR,UE5,UE6,UE7 ELSE 1540
1600 GOTO 10
1610 CLS
1620 LOCATE 10,10
1630 PRINT "DO YOU WANT TO RUN THE C-REM MODEL ?"
1640 LOCATE 15,15
1650 PRINT "ENTER * Y * FOR YES, * N * FOR NO."
1660 X$=INPUT$(1)
1670 IF X$="n" OR X$="N" THEN 1690
1680 IF X$="y" OR X$="Y" THEN RUN "C-REM" ELSE 1650
1690 END

```

```

1200 IF T$="C" OR T$="o" THEN 1230
1210 LPRINT UPOR(I,1),UPOR(I,2),UPOR(I,3),UPOR(I,4)
1220 GOTO 1240
1230 LPRINT UPOR(I,1),UPOR(I,2),UPOR(I,3)
1240 NEXT I
1250 LPRINT:LPRINT:LPRINT "      GRADE E5"
1260 FOR I = 1 TO F5
1270 LPRINT UE5(I,1),UE5(I,2)
1280 NEXT I
1290 LPRINT:LPRINT:LPRINT "      GRADE E6"
1300 FOR I = 1 TO F6
1310 LPRINT UE6(I,1),UE6(I,2)
1320 NEXT I
1330 LPRINT:LPRINT:LPRINT "      GRADE E7"
1340 FOR I = 1 TO F7
1350 LPRINT UE7(I,1),UE7(I,2)
1360 NEXT I
1370 LPRINT:LPRINT "IF YOU WANT TO MAKE CORRECTIONS TO "A:" YOU WILL HAVE"
1380 LPRINT "EDIT IT IN DOS."
1390 LPRINT "THE FILE WILL LOOK LIKE THE ONE BELOW. THE 99 IS THE END OF"
1400 LPRINT "EACH GRADE"
1410 LPRINT
1420 LPRINT "4      INDICATES NUMBER OF FIRST TERMERS E1 - E4"
1430 LPRINT "5      INDICATES NUMBER OF E5s"
1440 LPRINT "3      INDICATES NUMBER OF E6s"
1450 LPRINT "4      INDICATES NUMBER OF E7s"
1460 LPRINT "1      FIRST RECORD"
1470 LPRINT "12     TIME LEFT"
1480 LPRINT "1      INDICATES ACCOMPANIED OR UNACCOMPANIED"
1490 LPRINT "21     INDICATES THE TIME REMAINING IN THE UNIT"
1500 LPRINT "99      INDICATES THE END OF THE GRADE BEING ENTERED"
1510 CLOSE
1520 CLS
1530 LOCATE 10,10
1540 PRINT "DO YOU WANT TO CREATE ANOTHER UNIT PROFILE ?"
1550 LOCATE 15,15
1560 PRINT "ENTER * Y * FOR YES. * N * FOR NO "
1570 X$=INPUT$(1)
1580 IF X$="n" OR X$="N" THEN 1610
1590 IF X$="y" OR X$="Y" THEN ERASE UPOR,UE5,UE6,UE7 ELSE 1540
1600 GOTO 10
1610 CLS
1620 LOCATE 10,10
1630 PRINT "DO YOU WANT TO RUN THE C-REM MODEL ?"
1640 LOCATE 15,15
1650 PRINT "ENTER * Y * FOR YES. * N * FOR NO."
1660 X$=INPUT$(1)
1670 IF X$="n" OR X$="N" THEN 1690
1680 IF X$="y" OR X$="Y" THEN RUN "C-REM" ELSE 1650
1690 END

```

ANNEX III TO APPENDIX D
FORSCOM MODULE

CAA-SR-87-18

(NOT USED)

D-III-2

```

10 REM *****
20 REM **
30 REM **                forsoon                **
40 REM **                **
50 REM *****
60 REM **
70 REM **  this is the code for the forsoon module.
80 REM **
90 REM *****
100 CLS
110 DIM POR(125,2)
120 DIM STAT(125,2)
130 DIM MON(231)
140 DIM E3(75,2)
150 DIM E6(50,2)
160 DIM E7(30,2)
170 DIM E5S(250)
180 DIM E6S(250)
190 DIM E7S(250)
200 DIM E5STAT(125)
210 DIM E6STAT(125)
220 DIM E7STAT(125)
230 PRINT:PRINT:PRINT:PRINT
240 PRINT "THE DATA THAT YOU INPUT WILL BE AUTOMATICALLY STORED TO A FILE"
250 PRINT
260 PRINT "THAT YOU NAME SO THAT IT CAN BE USED AGAIN IN THE FUTURE."
270 PRINT
280 PRINT "REMEMBER, IF YOU USE THE SAME FILE NAME AS A PREVIOUS FILE"
290 PRINT
300 PRINT "THAT YOU INPUT, THE NEW DATA WILL BE SAVED AND THE OLD LOST."
310 PRINT:PRINT:PRINT:PRINT:PRINT
320 LINE INPUT "ENTER THE NAME OF THE DATA FILE ";DF$
330 IF DF$="" THEN 320
340 CLS:LOCATE 10,10
350 PRINT "IS "DF$" AN EXISTING FILE OR A NEW FILE?"
360 LOCATE 15,15:PRINT "ENTER * E * FOR AN EXISTING OR * N * FOR NEW FILE."
370 CF$=INPUT$(1)
380 IF CF$="" THEN 340
390 IF CF$="E" OR CF$="e" THEN 410
400 IF CF$="N" OR CF$="n" THEN 410 ELSE 340
410 CLS:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT
420 PRINT "ENTER THE TOE, UNIT DESCRIPTION OR BOTH FOR THE TYPE OF UNIT."
430 PRINT:PRINT
440 LINE INPUT "YOU WILL INPUT - ";UD$
450 IF CF$="N" OR CF$="n" THEN 480
460 IF CF$="E" OR CF$="e" THEN GOSUB 11510
470 GOTO 7690
480 CLS:PRINT
490 INPUT "ENTER THE TOTAL 1ST TERMERS IN THE UNIT ";CP
500 PRINT
510 INPUT "ENTER THE EXPECTED PERCENTAGE OF VEL SOLDIERS ";VE
520 PRINT
530 IF VE = 0 GOTO 600
540 VV=VE*.01
550 VEL=CINT(CP*VV)
560 INPUT "ENTER THE LENGTH OF A VEL CONTRACT IN MONTHS ";VT
570 PRINT
580 IF VE=100 THEN TT=VT-36:GOTO 720
590 GOTO 640
600 INPUT "ENTER THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS ";Y3

```

```

610 YY=Y3*.01
620 IF Y3=100 GOTO 680
630 YR3=CINT((CP-VEL)*YY)
640 YR4=CP-VEL-YR3
650 PRINT
660 PRINT "THE REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR ENLISTEES."
670 PRINT "*****"
680 PRINT
690 PRINT "ENTER THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
700 INPUT "THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT ";TT
710 PRINT
720 INPUT "ENTER THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA ";REE
730 RE=REE*.01
740 PRINT
750 INPUT "ENTER THE EXPECTED PROMOTION MONTH TO E5 ";PT
760 PRINT
770 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5 ";PPP
780 PP=PPP*.01
790 PRINT
800 INPUT "ENTER THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT ";ARR
810 AR=ARR*.01
820 PRINT
830 INPUT "ENTER THE INTERVAL FOR 1ST TERMER REPLACEMENTS ";RP
840 PRINT
850 PRINT "ENTER THE MINIMUM TIME IN MONTHS THAT A SOLDIER MUST BE IN THE"
860 INPUT "UNIT TO BE ELIGIBLE TO BE REASSIGNED ";REA
870 PRINT
880 PRINT "ENTER THE MINIMUM TIME IN MONTHS THAT A SOLDIER MUST HAVE REMAINING"
890 INPUT "IN THE SERVICE TO BE REASSIGNED ";MREA
900 PRINT
910 INPUT "ENTER THE EXPECTED MONTHLY PERCENTAGE OF REASSIGNMENTS ";PPREA
920 PREA=PPREA*.01
930 CLS:LOCATE 10,10
940 PRINT "DO YOU WANT BATTALION TOTALS FOR REPLACEMENTS ?"
950 LOCATE 15,15
960 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
970 BN$ = INPUT$(1)
980 IF BN$ = "N" OR BN$ = "n" THEN 1060
990 IF BN$="Y" OR BN$="y" THEN 1000 ELSE BEEP:GOTO 930
1000 CLS:PRINT:PRINT:PRINT:PRINT:PRINT
1010 PRINT "COMPANIES WILL START UP EVERY 12 MONTHS."
1020 PRINT:PRINT:PRINT
1030 PRINT "ENTER THE NUMBER OF COMPANIES IN THE BATTALION."
1040 INPUT "ENTER EITHER 3, 4, OR 5 ";COMP
1050 IF COMP<3 OR COMP>5 GOTO 1030
1060 CLS
1070 LOCATE 10,10
1080 PRINT "DO YOU WANT TO INPUT NCO DATA?"
1090 LOCATE 15,15
1100 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
1110 IN$ = INPUT$(1)
1120 IF IN$="N" OR IN$="n" THEN 1510
1130 IF IN$="Y" OR IN$="y" THEN 1140 ELSE BEEP:GOTO 1060
1140 CLS:PRINT
1150 INPUT "ENTER THE NUMBER OF AUTHORIZED E5s ";E5
1160 PRINT
1170 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E5 IN MONTHS ";E5T
1180 PRINT
1190 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s ";AR55
1200 PRINT:AR5=AR55*.01

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1210 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6 ";E5PP
1220 PRINT:E5P=E5PP*.01
1230 INPUT "ENTER THE NUMBER OF AUTHORIZED E6s ";E6
1240 PRINT
1250 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS ";E6T
1260 PRINT
1270 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s ";AR66
1280 PRINT:AR6=AR66*.01
1290 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7 ";E6PP
1300 PRINT:E6P=E6PP*.01
1310 INPUT "ENTER THE NUMBER OF AUTHORIZED E7s ";E7
1320 PRINT
1330 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS ";E7T
1340 PRINT
1350 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s ";AR77
1360 AR7=AR77*.01:PRINT
1370 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8 ";E7PP
1380 PRINT:E7P=E7PP*.01
1390 INPUT "ENTER THE EXPECTED PERCENT OF INITIAL NCO FILL ";NFF:NF=NFF*.01
1400 SE6=CINT(E5*NF):SE6=CINT(E6*NF):SE7=CINT(E7*NF):PRINT
1410 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
1420 PRINT "LIFETIME FOR:"
1430 PRINT
1440 INPUT "      E5s      ";E5FF:E5F=E5FF*.01
1450 INPUT "      E6s      ";E6FF:E6F=E6FF*.01
1460 INPUT "      E7s      ";E7FF:E7F=E7FF*.01
1470 PRINT
1480 INPUT "ENTER THE MONTH TO START NCO REPLACEMENTS";NRT
1490 PRINT
1500 INPUT "ENTER THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS";NRP
1510 CLS:PRINT
1520 INPUT "ENTER THE NUMBER OF MONTHS TO SIMULATE";MO
1530 PRINT
1540 INPUT "HOW MANY REPETITIONS--A MINIMUM OF 30 ARE REQUIRED";REPS
1550 CLS:LOCATE 10,10
1560 PRINT "DO YOU WANT A MONTHLY LISTING OF UNIT STRENGTH ?"
1570 LOCATE 15,15
1580 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
1590 A$=INPUT$(1)
1600 IF A$="N" OR A$="n" THEN 1620
1610 IF A$="Y" OR A$="y" THEN 1620 ELSE BEEP:GOTO 1550
1620 CLS:PRINT:PRINT:PRINT:PRINT
1630 PRINT "DO YOU WANT TO USE A UNIT'S PRESENT PROFILE THAT YOU "
1640 PRINT
1650 PRINT"CREATED IN A FILE ? ENTER * Y * FOR YES, * N * FOR NO."
1660 F$=INPUT$(1)
1670 IF F$ = "N" OR F$ = "n" THEN 1710
1680 IF F$ = "Y" OR F$ = "y" THEN 1690 ELSE BEEP:GOTO 1620
1690 CLS:PRINT:PRINT:LINE INPUT "ENTER THE FILE NAME ";FF$
1700 IF FF$="" THEN BEEP : GOTO 1690
1710 GOTO 7690
1720 FOR Z = 1 TO REPS
1730 REM"THIS PROGRAM IS CURRENTLY SET UP TOBE COMPILED IN THE BASIC COMPILER"
1740 REM"IN ORDER TO RUN THIS PROGRAM USING THE BASIC INTERPRETER, YOU MUST"
1750 REM"REMOVE THE REM FROM LINES 1830 - 1950. YOU MUST THEN REMOVE THE "
1760 REM"REM FROM LINE 10980 AND INSERT REM IN LINE 10970."
1770 REM"THE PROGRAM WILL NOW RUN. HOWEVER, IF YOU WANT TO RECOMPILE"
1780 REM"THE PROGRAM, YOU MUST REVERSE THE ABOVE PROCESS."
1790 ERASE E5
1800 ERASE E6

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1810 ERASE E7
1820 ERASE FOR
1830 REM IF Z>1 GOTO 1960
1840 REM DIM STAT(125,2)
1850 REM DIM MON(251)
1860 REM DIM E5S(250)
1870 REM DIM E6S(250)
1880 REM DIM E7S(250)
1890 REM DIM E5STAT(125)
1900 REM DIM E6STAT(125)
1910 REM DIM E7STAT(125)
1920 REM DIM FOR(125,2)
1930 REM DIM E5(75,2)
1940 REM DIM E6(50,2)
1950 REM DIM E7(30,2)
1960 RANDOMIZE TIMER
1970 TLOSS=0
1980 CLS
1990 LOCATE 10,10
2000 PRINT "CURRENTLY ON REPETITION "Z" OF "REPS" REPETITIONS."
2010 IF F$ = "Y" OR F$ = "y" THEN 2240 ELSE 2020
2020 FOR I = 0 TO VEL-1
2030 FOR (I,1)=1
2040 FOR (I,2)=VT-TT
2050 NEXT I
2060 FOR A = VEL TO (VEL+YR3-1)
2070 FOR (A,1)=2
2080 FOR (A,2)=36-TT
2090 NEXT A
2100 FOR C=VEL+YR3 TO CP-1
2110 FOR (C,1)=3
2120 FOR (C,2)=48-TT
2130 NEXT C
2140 FOR D = 0 TO SE5-1
2150 E5(D,1)=1:E5(D,2)=E5T
2160 NEXT D
2170 FOR D = 0 TO SE6-1
2180 E6(D,1)=1:E6(D,2)=E6T
2190 NEXT D
2200 FOR D = 0 TO SE7-1
2210 E7(D,1)=1:E7(D,2)=E7T
2220 NEXT D
2230 GOTO 2650
2240 REM UNIT INPUT MODULE
2250 IF Z=1 GOTO 2310
2260 OPEN "I",#1,FF$
2270 INPUT #1,FT
2280 INPUT #1,F5
2290 INPUT #1,F6
2300 INPUT #1,F7
2310 FOR T=1 TO FT+1
2320 INPUT #1,A
2330 IF A=99 GOTO 2410
2340 INPUT #1,SC
2350 IF A=99 GOTO 2410
2360 INPUT #1,TIS
2370 IF A=99 GOTO 2410
2380 IF SC=36 THEN FOR (T,1) = 2 ELSE FOR (T,1)=3
2390 FOR (T,2)=SC-TIS
2400 NEXT T

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2410 FOR T=1 TO F5+1
2420 IF EOF(1) THEN CLOSE:GOTO 2490
2430 INPUT #1,A
2440 IF A=99 GOTO 2490
2450 INPUT #1,A
2460 IF A=99 GOTO 2490
2470 E5(T,1) = 1:E5(T,2) =A
2480 NEXT T
2490 FOR T=1 TO F6+1
2500 IF EOF(1) THEN CLOSE:GOTO 2570
2510 INPUT #1,A
2520 IF A=99 GOTO 2570
2530 INPUT #1,A
2540 IF A=99 GOTO 2570
2550 E6(T,1) = 1:E6(T,2)=A
2560 NEXT T
2570 FOR T=1 TO F7+1
2580 IF EOF(1) THEN CLOSE:GOTO 2650
2590 INPUT #1,A
2600 IF A=99 THEN CLOSE:GOTO 2650
2610 INPUT #1,A
2620 IF A=99 THEN CLOSE:GOTO 2650
2630 E7(T,1) = 1:E7(T,2)=A
2640 NEXT T
2650 FOR B=1 TO MO
2660 LOCATE 15,15
2670 PRINT "CURRENTLY ON MONTH "B" OF A "MO" MONTH CYCLE."
2680 VLOSS=0
2690 Y3LOSS=0
2700 Y4LOSS=0
2710 E5LOSS=0
2720 E6LOSS=0
2730 E7LOSS=0
2740 RLOSS=0
2750 VNUM=0
2760 Y3NUM=0
2770 Y4NUM=0
2780 E5NUM=0
2790 E6NUM=0
2800 E7NUM=0
2810 RNUM=0
2820 FOR J=0 TO CP-1
2830 IF PQR(J,1)=0 GOTO 3630
2840 IF PQR(J,1)=2 GOTO 3090
2850 IF PQR(J,1)=3 GOTO 3320
2860 IF PQR(J,1)=10 GOTO 3550
2870 PQR(J,2)=PQR(J,2)-1
2880 VNUM=VNUM+1
2890 IF PQR(J,2)=0 THEN GOSUB 6260 ELSE GOTO 2910
2900 GOTO 3630
2910 IF B MOD RP=0 THEN 2920 ELSE 2980
2920 IF PQR(J,2)<VT-TT-REA THEN 2930 ELSE 2980
2930 IF PQR(J,2)<MREA GOTO 2980
2940 RD =RND
2950 IF RD>PREA GOTO 2980
2960 GOSUB 6220
2970 GOTO 3630
2980 RD = RND
2990 IF RD>AR GOTO 3020
3000 GOSUB 6220

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3010 GOTO 3630
3020 IF PQR(J,2) > VT-PT GOTO 3630
3030 RD = RND
3040 IF RD > PP GOTO 3630
3050 GOSUB 6220
3060 IF IN$="N" OR IN$="n" THEN 3630
3070 GOSUB 6680
3080 GOTO 3630
3090 REM PQR (J,1)=2
3100 PQR (J,2)=PQR (J,2)-1
3110 Y3NUM=Y3NUM+1
3120 IF PQR(J,2)=0 THEN GOSUB 6400 ELSE GOTO 3140
3130 GOTO 3630
3140 IF B MOD RP=0 THEN 3150 ELSE 3210
3150 IF PQR(J,2)=(36-TT-REA THEN 3160 ELSE 3210
3160 IF PQR(J,2)<MREA GOTO 3210
3170 RD =RND
3180 IF RD>PREA GOTO 3210
3190 GOSUB 6360
3200 GOTO 3630
3210 RD=RND
3220 IF RD>AR GOTO 3250
3230 GOSUB 6360
3240 GOTO 3630
3250 IF PQR(J,2) > 36-PT GOTO 3630
3260 RD=RND
3270 IF RD > PP GOTO 3630
3280 GOSUB 6360
3290 IF IN$="N" OR IN$="n" THEN 3630
3300 GOSUB 6680
3310 GOTO 3630
3320 REM PQR (J,1)=3
3330 PQR(J,2)=PQR(J,2)-1
3340 Y4NUM=Y4NUM+1
3350 IF PQR (J,2)=0 THEN GOSUB 6540 ELSE GOTO 3370
3360 GOTO 3630
3370 IF B MOD RP=0 THEN 3380 ELSE 3440
3380 IF PQR(J,2)=(48-TT-REA THEN 3390 ELSE 3440
3390 IF PQR(J,2)<MREA GOTO 3440
3400 RD =RND
3410 IF RD>PREA GOTO 3440
3420 GOSUB 6500
3430 GOTO 3630
3440 RD=RND
3450 IF RD > AR GOTO 3480
3460 GOSUB 6500
3470 GOTO 3630
3480 IF PQR(J,2)>48-PT GOTO 3630
3490 RD=RND
3500 IF RD>PP GOTO 3630
3510 GOSUB 6500
3520 IF IN$="N" OR IN$="n" THEN 3630
3530 GOSUB 6680
3540 GOTO 3630
3550 PQR(J,2)=PQR(J,2)-1
3560 RNUM=RNUM+1
3570 IF PQR(J,2)=0 THEN GOSUB 6640 GOTO 3630
3580 RD=RND
3590 IF RD>PP GOTO 3630
3600 GOSUB 6640

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3610 IF IN$="N" OR IN$="n" THEN 3630
3620 GOSUB 6680
3630 NEXT J
3640 TLOSS=TLOSS+VLOSS+Y3LOSS+Y4LOSS+RLOSS
3650 USTR=VNUM+Y3NUM+Y4NUM+RNUM
3660 ILOSS=CP-USTR
3670 IF B MOD RP=0 THEN Q=B/RP
3680 IF B MOD RP=0 THEN IL=ILOSS*ILOSS
3690 IF B MOD RP=0 THEN STAT(Q,1)=STAT(Q,1)+ILOSS
3700 IF B MOD RP=0 THEN STAT(Q,2)=STAT(Q,2)+IL:ILOSS=0
3710 IF B MOD RP=0 THEN GOSUB 6750
3720 IF B > 250 GOTO 3740
3730 MON(B) =MON(B)+ILOSS
3740 IF IN$="N" OR IN$="n" THEN 4260
3750 FOR K=0 TO 75
3760 IF E5(K,1)=0 GOTO 3910
3770 E5NUM=E5NUM+1:E5(K,2)=E5(K,2)-1
3780 IF E5(K,2)=0 THEN GOSUB 6970 ELSE 3800
3790 GOTO 3910
3800 RD=RND
3810 IF RD>AR5 GOTO 3830
3820 GOSUB 7020:GOTO 3910
3830 RD=RND
3840 IF RD>E5P GOTO 3910
3850 FOR A=0 TO 50
3860 IF E6(A,1)>0 GOTO 3900
3870 E6(A,1)=1:E6(A,2)=E5(K,2)+1
3880 E5NUM=E5NUM-1:E5(K,1)=0
3890 GOTO 3910
3900 NEXT A
3910 NEXT K
3920 FOR L=0 TO 50
3930 IF E6(L,1)=0 GOTO 4080
3940 E6NUM=E6NUM+1:E6(L,2)=E6(L,2)-1
3950 IF E6(L,2)=0 THEN GOSUB 7060 ELSE 3970
3960 GOTO 4080
3970 RD=RND
3980 IF RD>AR6 GOTO 4000
3990 GOSUB 7060:GOTO 4080
4000 RD=RND
4010 IF RD>E6P GOTO 4080
4020 FOR A=0 TO 30
4030 IF E7(A,1)>0 GOTO 4070
4040 E7(A,1)=1:E7(A,2)=E6(L,2)+1
4050 E6NUM=E6NUM-1:E6(L,1)=0
4060 GOTO 4080
4070 NEXT A
4080 NEXT L
4090 FOR M=0 TO 30
4100 IF E7(M,1)=0 GOTO 4200
4110 E7NUM=E7NUM+1:E7(M,2)=E7(M,2)-1
4120 IF E7(M,2)=0 THEN GOSUB 7100 ELSE 4140
4130 GOTO 4200
4140 RD=RND
4150 IF RD>AR7 GOTO 4170
4160 GOSUB 7100:GOTO 4200
4170 RD=RND
4180 IF RD>E7P GOTO 4200
4190 E7NUM=E7NUM-1:E7(M,1)=0
4200 NEXT M

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4210 IF B MOD NRP=0 THEN GOSUB 7140
4220 IF B>250 GOTO 4260
4230 E5S(B)=E5S(B)+E5NUM
4240 E6S(B)=E6S(B)+E6NUM
4250 E7S(B)=E7S(B)+E7NUM
4260 NEXT B
4270 IF Z=REPS THEN GOTO 4280 ELSE GOTO 6160
4280 C=RP
4290 CLS:BEEP:LOCATE 5,10
4300 PRINT "PRINTING COMPANY FIRST TERMER COHORT REPLACEMENT PACKAGES"
4310 FOR T=1 TO MO/RP
4320 V=(Z*STAT(T,2)-STAT(T,1)*2)/(Z*(Z-1))
4330 CI = (1.645*(SQR(V)))/SQR(Z)
4340 AVE = STAT(T,1)/Z
4350 LWBND = AVE - CI
4360 UPBND = AVE + CI
4370 PSTR=((CP-CINT(AVE))/CP)*100
4380 CA=CINT(AVE)
4390 LPRINT USING "###";C;
4400 LPRINT ;
4410 LPRINT USING "###    ";CA;
4420 LPRINT "    ";
4430 LPRINT USING"###.###    ";LWBND;UPBND;SQR(V)/SQR(Z);PSTR
4440 C=C+RP
4450 NEXT T
4460 IF IN$="N" OR IN$="n" THEN 4720
4470 CLS:LOCATE 5,10
4480 PRINT "PRINTING MINIMUM NCO STRENGTH BEFORE REPLACEMENTS"
4490 LPRINT CHR$(12)
4500 LPRINT SPC(3)"MINIMUM NCO STRENGTH BEFORE REPLACEMENTS"
4510 LPRINT SPC(5)"-----"
4520 LPRINT
4530 LPRINT "MONTH","E5 STR","E6 STR","E7 STR"
4540 LPRINT
4550 CC=NRP
4560 FOR TQ=1 TO MO/NRP
4570 AV5=CINT(E5STAT(TQ)/Z)
4580 AV6=CINT(E6STAT(TQ)/Z)
4590 AV7=CINT(E7STAT(TQ)/Z)
4600 IF AV5>E5 THEN TT$="*" ELSE TT$=" "
4610 IF AV6>E6 THEN T6$="*" ELSE T6$=" "
4620 IF AV7>E7 THEN T7$="*" ELSE T7$=" "
4630 LPRINT USING "###";CC:LPRINT ;
4640 LPRINT USING "###";AV5:LPRINT "TT$";LPRINT ;
4650 LPRINT USING "###";AV6:LPRINT "T6$";LPRINT ;
4660 LPRINT USING "###";AV7:LPRINT "T7$";
4670 CC=CC+NRP
4680 NEXT TQ
4690 LPRINT
4700 LPRINT
4710 LPRINT "* ---- INDICATES OVERSTRENGTH"
4720 IF A$="N" OR A$="n" THEN 3060
4730 IF MO > 250 THEN MOO= 250 ELSE MOO=MO
4740 CLS:LOCATE 5,10
4750 PRINT "PRINTING MONTHLY UNIT STRENGTH BY GRADE"
4760 LPRINT CHR$(12)
4770 LPRINT SPC(20)"MONTHLY UNIT STRENGTH BY GRADE"
4780 LPRINT SPC(20)"-----"
4790 LPRINT
4800 LPRINT "MONTH" TAB(12) "E1-4" TAB(24) "E5s" TAB(36) "E6s" TAB(48) "E7s".

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4810 LPRINT TAB(56) "% UNIT STR/NCO STR"
4820 LPRINT
4830 FOR Q=1 TO MOO
4840 AV=MON(Q)/Z:US=CP-CINT(AV)
4850 E5NU=CINT(E5S(Q)/Z)
4860 E6NU=CINT(E6S(Q)/Z)
4870 E7NU=CINT(E7S(Q)/Z)
4880 TST=CP+E5+E6+E7
4890 TS=US+E5NU+E6NU+E7NU:PPT=(TS/TST)*100
4900 IF IN$="N" OR IN$="n" THEN 4960
4910 NST=E5+E6+E7
4920 NS=E5NU+E6NU+E7NU:NT=(NS/NST)*100
4930 IF E5NU>E5 THEN TT$="*" ELSE TT$=" "
4940 IF E6NU>E6 THEN T6$="*" ELSE T6$=" "
4950 IF E7NU>E7 THEN T7$="*" ELSE T7$=" "
4960 LPRINT USING "###";Q;
4970 LPRINT TAB(12) US TAB(24) E5NU"TT$ TAB(36) E6NU"T6$;
4980 LPRINT TAB(48) E7NU"T7$ TAB(60);
4990 LPRINT USING "###.##";PPT;
5000 LPRINT " / ";
5010 LPRINT USING "###.##";NT
5020 NEXT Q
5030 LPRINT
5040 LPRINT
5050 LPRINT "* ---- INDICATES OVERSTRENGTH"
5060 IF BN$="N" OR BN$="n" THEN 6170
5070 IF RP=3 THEN 5080 ELSE GOTO 5090
5080 AA=4:BB=8:CC=12:DD=16:GOTO 5150
5090 IF RP=4 THEN 5100 ELSE GOTO 5110
5100 AA=3:BB=6:CC=9:DD=12:GOTO 5150
5110 IF RP=6 THEN 5140 ELSE GOTO 5120
5120 LPRINT "BATTALION STRENGTHS UNABLE TO BE CALCULATED FOR ROTATION."
5130 GOTO 6170
5140 AA=2:BB=4:CC=6:DD=8
5150 LPRINT CHR$(12)
5160 CLS:LOCATE 5,10
5170 PRINT "PRINTING BATTALION FIRST TERMER COHORT REPLACEMENT PACKAGES"
5180 LPRINT SPC(10)"BATTALION FIRST TERMER COHORT REPLACEMENT PACKAGES"
5190 LPRINT SPC(10)"-----":LPRINT
5200 LPRINT TAB(22) "90% CONFIDENCE INTERVAL"
5210 LPRINT "MONTH" TAB(8) "CO" TAB(12) "PKG SIZE" TAB(24) "LOWER B",
5220 LPRINT TAB(36) "UPPER B" TAB(48) "STD DEV" TAB(59) "% UNIT STR"
5230 LPRINT
5240 C=RP
5250 CA=0:ACA=0:BCA=0:CCA=0:DCA=0
5260 FOR T=1 TO MO/RP
5270 V=(Z*STAT(T,2)-STAT(T,1) 2)/(Z*(Z-1))
5280 CI = (1.645*(SQR(V)))/SQR(Z)
5290 AVE = STAT(T,1)/Z
5300 LWBND = AVE - CI
5310 UPBND = AVE + CI
5320 PSTR=((CP-CINT(AVE))/CP)*100
5330 CA=CINT(AVE)
5340 IF T<AA GOTO 5720
5350 ZA=T-AA+1
5360 VA=(Z*STAT(ZA,2)-STAT(ZA,1) 2)/(Z*(Z-1))
5370 ACI = (1.645*(SQR(VA)))/SQR(Z)
5380 AAVE = STAT(ZA,1)/Z
5390 LWA = AAVE - ACI
5400 UPA = AAVE + ACI

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5410 PSA=((CP-CINT(AAVE))/CP)*100
5420 ACA=CINT(AAVE)
5430 IF T<BB GOTO 5720
5440 BZA=T-BB+1
5450 VB=(Z*STAT(BZA,2)-STAT(BZA,1) 2)/(Z*(Z-1))
5460 BCI = (1.645*(SOR(VB)))/SOR(Z)
5470 BAVE = STAT(BZA,1)/Z
5480 LWB = BAVE - BCI
5490 UPB = BAVE + BCI
5500 PSB=((CP-CINT(BAVE))/CP)*100
5510 BCA=CINT(BAVE)
5520 IF COMP = 3 GOTO 5720
5530 IF T<CC GOTO 5720
5540 CZ=T-CC+1
5550 VVC=(Z*STAT(CZ,2)-STAT(CZ,1) 2)/(Z*(Z-1))
5560 CCI = (1.645*(SOR(VVC)))/SOR(Z)
5570 CAVE = STAT(CZ,1)/Z
5580 LWC = CAVE - CCI
5590 UPC = CAVE + CCI
5600 PSC=((CP-CINT(CAVE))/CP)*100
5610 CCA=CINT(CAVE)
5620 IF COMP= 4 GOTO 5720
5630 IF T<DD GOTO 5720
5640 DZ=T-DD+1
5650 VD=(Z*STAT(DZ,2)-STAT(DZ,1) 2)/(Z*(Z-1))
5660 DCI = (1.645*(SOR(VD)))/SOR(Z)
5670 DAVE = STAT(DZ,1)/Z
5680 LWD = DAVE - DCI
5690 UPD = DAVE + DCI
5700 PSD=((CP-CINT(DAVE))/CP)*100
5710 DCA=CINT(DAVE)
5720 LPRINT USING "****";C;
5730 LPRINT TAB(8) "A" TAB(13);
5740 LPRINT USING "****";CA;
5750 LPRINT TAB(24)
5760 LPRINT USING "****. ";LWBND; LPRINT TAB(36);
5770 LPRINT USING "****. ";UPBND; LPRINT TAB(48);
5780 LPRINT USING "****. ";SOR(V)/SOR(Z); LPRINT TAB(60);
5790 LPRINT USING "****. ";PSTR
5800 IF T<AA GOTO 6100
5810 LPRINT TAB(8) "B" TAB(13);
5820 LPRINT USING "****";ACA; LPRINT TAB(24);
5830 LPRINT USING "****. ";LWA; LPRINT TAB(36);
5840 LPRINT USING "****. ";UPA; LPRINT TAB(48);
5850 LPRINT USING "****. ";SOR(VA)/SOR(Z); LPRINT TAB(60);
5860 LPRINT USING "****. ";PSA
5870 IF T<BB GOTO 6100
5880 LPRINT TAB(8) "C" TAB(13);
5890 LPRINT USING "****";BCA; LPRINT TAB(24);
5900 LPRINT USING "****. ";LWB; LPRINT TAB(36);
5910 LPRINT USING "****. ";UPB; LPRINT TAB(48);
5920 LPRINT USING "****. ";SOR(VB)/SOR(Z); LPRINT TAB(60);
5930 LPRINT USING "****. ";PSB
5940 IF COMP = 3 GOTO 6100
5950 IF T<CC GOTO 6100
5960 LPRINT TAB(8) "D" TAB(13);
5970 LPRINT USING "****";CCA; LPRINT TAB(24);
5980 LPRINT USING "****. ";LWC; LPRINT TAB(36);
5990 LPRINT USING "****. ";UPC; LPRINT TAB(48);
6000 LPRINT USING "****. ";SOR(VVC)/SOR(Z); LPRINT TAB(60);

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6010 LPRINT USING "###.#";PSC
6020 IF COMP=4 GOTO 6100
6030 IF T<DD GOTO 6100
6040 LPRINT TAB(8) "E" TAB(13);
6050 LPRINT USING "###";DCA;; LPRINT TAB(24);
6060 LPRINT USING "###.#";LWD;; LPRINT TAB(36);
6070 LPRINT USING "###.#";UPD;; LPRINT TAB(48);
6080 LPRINT USING "###.#";SOR(VD)/SOR(Z) ; LPRINT TAB(60);
6090 LPRINT USING "###.#";PSD
6100 IF T<AA GOTO 6130
6110 LPRINT TAB(13)"----":LPRINT TAB(13);
6120 LPRINT USING "###";CA+ACA+BCA+CCA+DCA
6130 LPRINT
6140 C=C+RP
6150 NEXT T
6160 NEXT Z
6170 LPRINT
6180 LPRINT DATE$,TIME$
6190 GOTO 7410
6200 RUN "LOGO"
6210 END
6220 VLOSS=VLOSS+1
6230 POR(J,1)=0
6240 VNUM=VNUM-1
6250 RETURN
6260 RD=RND
6270 IF RD>RE GOTO 6320
6280 POR(J,2)=12
6290 POR(J,1)=10
6300 RNUM=RNUM+1
6310 GOTO 6330
6320 POR(J,1)=0
6330 VNUM=VNUM-1
6340 VLOSS=VLOSS+1
6350 RETURN
6360 Y3LOSS=Y3LOSS+1
6370 POR(J,1)=0
6380 Y3NUM=Y3NUM-1
6390 RETURN
6400 RD=RND
6410 IF RD>RE GOTO 6460
6420 POR(J,2)=12
6430 POR(J,1)=10
6440 RNUM=RNUM+1
6450 GOTO 6470
6460 POR(J,1)=0
6470 Y3NUM=Y3NUM-1
6480 Y3LOSS=Y3LOSS+1
6490 RETURN
6500 Y4LOSS=Y4LOSS+1
6510 Y4NUM=Y4NUM-1
6520 POR(J,1)=0
6530 RETURN
6540 RD=RND
6550 IF RD>RE GOTO 6600
6560 POR(J,2)=12
6570 POR(J,1)=10
6580 RNUM=RNUM+1
6590 GOTO 6610
6600 POR(J,1)=0

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6610 Y4NUM=Y4NUM-1
6620 Y4LOSS=Y4LOSS+1
6630 RETURN
6640 RLOSS=RLOSS+1
6650 RNUM=RNUM-1
6660 PQR(J,1)=0
6670 RETURN
6680 FOR K=0 TO 75
6690 IF E5(K,1)>0 GOTO 6730
6700 E5(K,1)=2
6710 E5(K,2)=PQR(J,2)+1
6720 GOTO 6740
6730 NEXT K
6740 RETURN
6750 CNUM=0
6760 FOR X=0 TO CP-1
6770 IF PQR(K,1)>0 GOTO 6950
6780 IF VE = 0 GOTO 6860
6790 IF VE = 100 GOTO 6820
6800 RD=RND
6810 IF RD>VV GOTO 6920
6820 PQR(K,1)=1
6830 PQR(K,2)=VT-TT
6840 VNUM=VNUM+1:CNUM=CNUM+1
6850 GOTO 6950
6860 RD=RND
6870 IF RD>YY GOTO 6920
6880 Y3NUM=Y3NUM+1
6890 PQR(K,1)=2
6900 PQR(K,2)=36-TT
6910 GOTO 6950
6920 Y4NUM=Y4NUM + 1
6930 PQR(K,1)=3
6940 PQR(K,2)=48-TT
6950 NEXT K
6960 RETURN
6970 IF E5(K,1)=1 THEN 7020
6980 RD=RND
6990 IF RD>RE THEN 7020
7000 E5(K,1)=1:E5(K,2)=12
7010 GOTO 7050
7020 E5NUM=E5NUM-1
7030 E5(K,1)=0
7040 E5LOSS=E5LOSS+1
7050 RETURN
7060 E6NUM=E6NUM-1
7070 E6(L,1)=0
7080 E6LOSS=E6LOSS+1
7090 RETURN
7100 E7NUM=E7NUM-1
7110 E7(M,1)=0
7120 E7LOSS=E7LOSS+1
7130 RETURN
7140 QQ=B/NRP
7150 E5STAT(QQ)=E5STAT(QQ)+E5NUM:E5LOSS=0
7160 E6STAT(QQ)=E6STAT(QQ)+E6NUM:E6LOSS=0
7170 E7STAT(QQ)=E7STAT(QQ)+E7NUM:E7LOSS=0
7180 IF B<NRT GOTO 7400
7190 IF E5NUM=CINT(E5*E5F) GOTO 7260
7200 FOR A=0 TO 75

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7210 IF E5(A,1)>0 GOTO 7250
7220 E5(A,1)=1:E5(A,2)=E5T
7230 E5NUM=E5NUM+1
7240 IF E5NUM=CINT(E5*E5F) GOTO 7260
7250 NEXT A
7260 IF E6NUM=CINT(E6*E6F) GOTO 7330
7270 FOR A = 0 TO 50
7280 IF E6(A,1)>0 GOTO 7320
7290 E6(A,1)=1:E6(A,2)=E6T
7300 E6NUM=E6NUM+1
7310 IF E6NUM=CINT(E6*E6F) GOTO 7330
7320 NEXT A
7330 IF E7NUM=CINT(E7*E7F) GOTO 7400
7340 FOR A = 0 TO 30
7350 IF E7(A,1)>0 GOTO 7390
7360 E7(A,1)=1:E7(A,2)=E7T
7370 E7NUM=E7NUM+1
7380 IF E7NUM=CINT(E7*E7F) GOTO 7400
7390 NEXT A
7400 RETURN
7410 CLS:BEEP
7420 LPRINT CHR$(12)
7430 PRINT:PRINT:PRINT:BEEP
7440 PRINT "YOU CAN CONTINUE THE SESSION AND MAKE MODIFICATIONS TO"
7450 PRINT "ANY OR ALL OF THE INPUT VARIABLES."
7460 LOCATE 10,10
7470 PRINT "TYPE A *Y* TO CONTINUE THE SESSION OR AN *N* TO END IT."
7480 Y$=INPUT$(1)
7490 IF Y$="Y" OR Y$="y" THEN 7510
7500 IF Y$="N" OR Y$="n" THEN GOTO 11000 ELSE BEEP:GOTO 7460
7510 CLS
7520 LOCATE 10,10
7530 PRINT "DO YOU WANT TO CHANGE ANY OR ALL OF THE VARIABLES OR"
7540 PRINT "CHANGE DATA FILES?"
7550 LOCATE 15,15
7560 PRINT "TYPE A *Y* FOR YES AND AN *N* FOR NO."
7570 Y$=INPUT$(1)
7580 IF Y$="Y" OR Y$="y" THEN 7600
7590 IF Y$="N" OR Y$="n" THEN 10110 ELSE BEEP:GOTO 7510
7600 CLS:LOCATE 10,10
7610 PRINT "TYPE *V* TO CHANGE INDIVIDUAL VARIABLES "
7620 LOCATE 12,10
7630 PRINT "OR *D* TO CHANGE THE DATA FILE FOR ALL INPUT VARIABLES"
7640 Y$=INPUT$(1)
7650 IF Y$="V" OR Y$="v" THEN 7690
7660 IF Y$="D" OR Y$="d" THEN 7670 ELSE BEEP:GOTO 7600
7670 LOCATE 15,10:LINE INPUT "ENTER THE NAME OF THE DATA FILE ";DF$
7680 GOTO 340
7690 CLS
7700 PRINT
7710 PRINT "A--THE TOTAL FIRST TERMERS IN THE UNIT-- "CP
7720 PRINT "B--THE EXPECTED PERCENTAGE OF VEL SOLDIERS--"VE
7730 VV=VE*.01:VEL=CINT(CP*VV)
7740 PRINT "C--THE LENGTH OF A VEL CONTRACT IN MONTHS--"VT
7750 PRINT "D--THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS--"Y3
7760 PRINT "E--THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
7770 PRINT "      THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT--"TT
7780 PRINT "F--THE PERCENTAGE OF EXPECTED REUPS FOR PDA--"REE
7790 RE=REE*.01
7800 PRINT "G--THE EXPECTED PROMOTION MONTH TO E5--"PT

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7810 PRINT "H--THE EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5--"PPP
7820 PP=PPP*.01
7830 PRINT "I--THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT--"ARR
7840 AR=ARR*.01
7850 PRINT "J--THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS--"RP
7860 PRINT
7870 PRINT "*** IF YOU WISH TO DISCONTINUE THE SESSION, PRESS ENTER ***."
7880 PRINT
7890 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
7900 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
7910 PRINT "THE CHANGES TYPE IN AN * X *."
7920 PRINT
7930 PRINT
7940 V$=INPUT$(1)
7950 IF V$="X" OR V$="x" THEN 8250
7960 IF V$="A" OR V$="a" THEN 8080
7970 IF V$="B" OR V$="b" THEN 8090
7980 IF V$="C" OR V$="c" THEN 8110
7990 IF V$="D" OR V$="d" THEN 8130
8000 IF V$="E" OR V$="e" THEN 8150
8010 IF V$="F" OR V$="f" THEN 8180
8020 IF V$="G" OR V$="g" THEN 8200
8030 IF V$="H" OR V$="h" THEN 8210
8040 IF V$="I" OR V$="i" THEN 8220
8050 IF V$="J" OR V$="j" THEN 8240
8060 IF V$>"J" OR V$>"j" THEN 7690
8070 IF V$>" " THEN 1000
8080 INPUT "A--ENTER THE TOTAL 1ST TERMERS IN THE UNIT ";CP:GOTO 7690
8090 INPUT "B--ENTER THE EXPECTED PERCENTAGE OF VEL SOLDIERS--";VE
8100 GOTO 7690
8110 INPUT "C--ENTER THE LENGTH OF A VEL CONTRACT IN MONTHS--";VT
8120 GOTO 7690
8130 INPUT "D--ENTER THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS--";Y3
8140 GOTO 7690
8150 PRINT "E--ENTER THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
8160 INPUT " " THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT";TT
8170 GOTO 7690
8180 INPUT "F--ENTER THE PERCENTAGE OF EXPECTED REUPS FOR PDA--";REE
8190 GOTO 7690
8200 INPUT "G--ENTER THE EXPECTED PROMOTION MONTH TO E5";PT:GOTO 7690
8210 INPUT "H--ENTER THE EXPECTED MONTHLY PROMOTION % TO E5";PPP:GOTO 7690
8220 INPUT "I--ENTER THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT";ARR
8230 GOTO 7690
8240 INPUT "J--ENTER THE INTERVAL FOR REPLACEMENTS, IN MONTHS";RP:GOTO 7690
8250 CLS
8260 PRINT
8270 IF A$="N" OR A$="n" THEN B$="NO"
8280 IF A$="Y" OR A$="y" THEN B$="YES"
8290 IF BN$="N" OR BN$="n" THEN BBN$="NO"
8300 IF BN$="Y" OR BN$="y" THEN BBN$="YES"
8310 PRINT "K--THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
8320 PRINT " " MUST BE IN THE UNIT TO BE ELIGIBLE TO BE REASSIGNED--"REA
8330 PRINT "L--THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
8340 PRINT " " MUST HAVE REMAINING IN THE SERVICE TO BE REASSIGNED--"MREA
8350 PRINT "M--THE EXPECTED MONTHLY PERCENTAGE OF REASSIGNMENTS--"PPREA
8360 PPREA=PPREA*.01
8370 PRINT "N--THE NUMBER OF MONTHS TO SIMULATE--"MO
8380 PRINT "O--NUMBER OF REPETITIONS--"REPS
8390 PRINT "P--MONTHLY LISTING OF UNIT STRENGTH-- "B$
8400 PRINT "Q--LISTING OF BATTALION TOTALS FOR REPLACEMENTS-- "BBN$

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8410 IF BN$ = "N" OR BN$ = "n" THEN 8430
8420 PRINT "    THE NUMBER OF COMPANIES IN THE BATTALION IS-- "COMP
8430 PRINT
8440 PRINT
8450 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
8460 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
8470 PRINT "THE CHANGES TYPE IN AN * X *."
8480 PRINT
8490 PRINT
8500 V$=INPUT$(1)
8510 IF V$="X" OR V$="x" THEN 8850
8520 IF V$="K" OR V$="k" THEN 8610
8530 IF V$="L" OR V$="l" THEN 8640
8540 IF V$="M" OR V$="m" THEN 8670
8550 IF V$="N" OR V$="n" THEN 8690
8560 IF V$="O" OR V$="o" THEN 8700
8570 IF V$="P" OR V$="p" THEN 8710
8580 IF V$="Q" OR V$="q" THEN 8760
8590 IF V$>"Q" OR V$>"q" THEN 8250
8600 IF V$>" " THEN 8250
8610 PRINT "K--ENTER THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
8620 INPUT "    MUST BE IN THE UNIT TO BE ELIGIBLE TO BE REASSIGNED--";REA
8630 GOTO 8250
8640 PRINT "L--ENTER THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
8650 INPUT "    MUST HAVE REMAINING IN THE SERVICE TO BE REASSIGNED--";MREA
8660 GOTO 8250
8670 INPUT "M--ENTER THE EXPECTED MONTHLY PERCENTAGE OF REASSIGNMENTS--";PPREA
8680 GOTO 8250
8690 INPUT "N--ENTER THE NUMBER OF MONTHS TO SIMULATE";MO;GOTO 8250
8700 INPUT "O--HOW MANY REPETITIONS";REPS;GOTO 8250
8710 PRINT "P--DO YOU WANT A MONTHLY LISTING OF UNIT STRENGTH"
8720 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO.":A$=INPUT$(1)
8730 IF A$="Y" OR A$="y" THEN 8750
8740 IF A$="N" OR A$="n" THEN 8750 ELSE BEEP;GOTO 8710
8750 GOTO 8250
8760 PRINT "Q--DO YOU WANT BATTALION TOTALS FOR REPLACEMENTS ?"
8770 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
8780 BN$ = INPUT$(1)
8790 IF BN$ = "N" OR BN$ = "n" THEN 8250
8800 IF BN$="Y" OR BN$="y" THEN 8810 ELSE BEEP;GOTO 8760
8810 PRINT "ENTER THE NUMBER OF COMPANIES IN THE BATTALION."
8820 INPUT "ENTER EITHER 3, 4, OR 5";COMP
8830 IF COMP<3 OR COMP>5 GOTO 8810
8840 GOTO 8250
8850 IF CF$="E" OR CF$="e" THEN 8930
8860 CLS;LOCATE 10,10;PRINT "DO YOU WANT TO INPUT OR CHANGE NCO DATA ?"
8870 LOCATE 15,15
8880 PRINT "ENTER ** Y ** FOR YES OR AN ** N ** FOR NO."
8890 IIN$ = INPUT$(1)
8900 IF IIN$="N" OR IIN$="n" THEN 9910
8910 IF IIN$="Y" OR IIN$="y" THEN 8920 ELSE BEEP;GOTO 8860
8920 IF IN$="N" OR IN$="n" AND IIN$="Y" OR IIN$="y" THEN IN$="Y"
8930 CLS;PRINT "NCO DATA *****";PRINT
8940 PRINT "A--ENTER THE NUMBER OF AUTHORIZED E5s---"E5
8950 PRINT "B--ENTER THE EXPECTED TOUR LENGTH FOR AN E5. IN MONTHS---"E5T
8960 PRINT "C--ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s---"AR55
8970 PRINT "D--ENTER THE EXPECTED MONTHLY PROMOTION % OF E5s TO E6---"E5PP
8980 PRINT:E5P=E5PP*.01
8990 PRINT "E--ENTER THE NUMBER OF AUTHORIZED E6s---"E6

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9000 PRINT "F--ENTER THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS---"E6T
9010 PRINT "G--ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s---"AR66
9020 PRINT "H--ENTER THE EXPECTED MONTHLY PROMOTION % OF E6s TO E7---"E6PP
9030 PRINT:E6P=E6PP*.01
9040 PRINT "I--ENTER THE NUMBER OF AUTHORIZED E7s---"E7
9050 PRINT "J--ENTER THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS---"E7T
9060 PRINT "K--ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s---"AR77
9070 PRINT "L--ENTER THE EXPECTED MONTHLY PROMOTION % OF E7s TO E8---"E7PP
9080 PRINT:E7P=E7PP*.01
9090 PRINT
9100 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
9110 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
9120 PRINT "THE CHANGES TYPE IN AN * X *."
9130 PRINT
9140 P$=INPUT$(1)
9150 IF E5>0 THEN IN$="Y"
9160 IF P$="X" OR P$="x" THEN 9460
9170 IF P$="A" OR P$="a" THEN 9310
9180 IF P$="B" OR P$="b" THEN 9320
9190 IF P$="C" OR P$="c" THEN 9330
9200 IF P$="D" OR P$="d" THEN 9340
9210 IF P$="E" OR P$="e" THEN 9360
9220 IF P$="F" OR P$="f" THEN 9370
9230 IF P$="G" OR P$="g" THEN 9380
9240 IF P$="H" OR P$="h" THEN 9390
9250 IF P$="I" OR P$="i" THEN 9410
9260 IF P$="J" OR P$="j" THEN 9420
9270 IF P$="K" OR P$="k" THEN 9430
9280 IF P$="L" OR P$="l" THEN 9440
9290 IF P$>"L" OR P$>"I" THEN 8930
9300 IF P$>" " THEN 8930
9310 INPUT "ENTER THE NUMBER OF AUTHORIZED E5s";E5:GOTO 8930
9320 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS";E5T:GOTO 8930
9330 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E5s";AR55:GOTO 8930
9340 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6";E5FP
9350 GOTO 8930
9360 INPUT "ENTER THE NUMBER OF AUTHORIZED E6s";E6:GOTO 8930
9370 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS";E6T:GOTO 8930
9380 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E6s";AR66:GOTO 8930
9390 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7";E6PP
9400 GOTO 8930
9410 INPUT "ENTER THE NUMBER OF AUTHORIZED E7s";E7:GOTO 8930
9420 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS";E7T:GOTO 8930
9430 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E7s";AR77:GOTO 8930
9440 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8";E7PP
9450 GOTO 8930
9460 CLS:PRINT "NCO DATA *****";PRINT:PRINT
9470 PRINT "M--ENTER THE EXPECTED PERCENT OF INITIAL NCO FILL"NFF:NF*NFF*.01
9480 SE5=CINT(E5*NF):SE6=CINT(E6*NF):SE7=CINT(E7*NF)
9490 PRINT
9500 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
9510 PRINT "LIFETIME FOR:"
9520 PRINT
9530 PRINT "      N--E5s ---"E5FF:E5F=E5FF*.01
9540 PRINT "      O--E6s ---"E6FF:E6F=E6FF*.01
9550 PRINT "      P--E7s ---"E7FF:E7F=E7FF*.01
9560 PRINT
9570 PRINT "Q--ENTER THE MONTH TO START NCO REPLACEMENTS---"NRT
9580 PRINT "R--ENTER THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS---"NRP
9590 PRINT
9600 PRINT

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9610 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
9620 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
9630 PRINT "THE CHANGES TYPE IN AN * X *."
9640 PRINT
9650 PRINT
9660 P$=INPUT$(1)
9670 IF P$="X" OR P$="x" THEN 9900
9680 IF P$="M" OR P$="m" THEN 9770
9690 IF P$="N" OR P$="n" THEN 9780
9700 IF P$="O" OR P$="o" THEN 9810
9710 IF P$="P" OR P$="p" THEN 9840
9720 IF P$="Q" OR P$="q" THEN 9870
9730 IF P$="R" OR P$="r" THEN 9880
9740 IF P$="M" OR P$="m" THEN 9460
9750 IF P$="R" OR P$="r" THEN 9460
9760 IF P$="" THEN 9460
9770 INPUT "ENTER THE EXPECTED PERCENT OF INITIAL NCO FILL";NFF:GOTO 9460
9780 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
9790 PRINT "LIFETIME FOR:"
9800 INPUT "E5: ---";E5FF:GOTO 9460
9810 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
9820 PRINT "LIFETIME FOR:"
9830 INPUT "E6: ---";E6FF:GOTO 9460
9840 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
9850 PRINT "LIFETIME FOR:"
9860 INPUT "E7: ---";E7FF:GOTO 9460
9870 INPUT "ENTER THE NUMBER OF THE MONTH TO START NCO FILLS";NRT:GOTO 9460
9880 INPUT "ENTER THE NUMBER OF THE MONTH FOR NCO REPLACEMENTS";NRP
9890 GOTO 9460
9900 CLS:IF NRP=0 GOTO 9880
9910 CLS:LOCATE 10,10
9920 IF F$="N" OR F$="n" OR F$="" GOTO 9950
9930 PRINT "CURRENT UNIT FILE THAT HAS BEEN INPUTED IS  "F$"."
9940 GOTO 9980
9950 PRINT "DO YOU WANT TO INPUT A FILE FOR A UNIT--*Y* FOR YES *N* FOR NO "
9960 CCH$=INPUT$(1):IF CCH$="Y" OR CCH$="y" THEN F$="Y" :GOTO 10080
9970 IF CCH$="N" OR CCH$="n" THEN 10050 ELSE 9910
9980 LOCATE 15,15
9990 PRINT "ENTER * Y * TO USE THIS FILE OR * N * TO CHANGE/DELETE THE FILE."
10000 CH$=INPUT$(1):IF CH$="Y" OR CH$="y" GOTO 10110
10010 IF CH$="N" OR CH$="n" THEN 10020 ELSE 9910
10020 CLS:PRINT "ENTER * Y * TO INPUT A NEW FILE OR * N * FOR NO FILE."
10030 F1$=INPUT$(1)
10040 IF F1$="n" OR F1$="N" THEN 10050 ELSE 10070
10050 F$="N"
10060 GOTO 10110
10070 IF F1$="Y" OR F1$="y" THEN 10080 ELSE 10020
10080 PRINT:PRINT:LINE INPUT "ENTER THE NAME OF THE NEW UNIT INPUT FILE  ":FF$
10090 IF FF$="" THEN BEEP : GOTO 10080
10100 F$="Y"
10110 CLS:LOCATE 10,10
10120 IF CF$="n" OR CF$="N" THEN GOSUB 11110 ELSE 10150
10130 CF$="E"
10140 GOTO 10240
10150 PRINT "THE EXISTING FILE IS  "DF$ ". DO YOU WANT TO SAVE ANY CHANGES ",
10160 PRINT "TO A NEW FILE ?"
10170 LOCATE 15,15:PRINT "ENTER *S* TO SAVE OR *C* TO CONTINUE."
10180 SS$=INPUT$(1):IF SS$="c" OR SS$="C" THEN 10240 ELSE 10190
10190 IF SS$="s" OR SS$="S" THEN 10200 ELSE 10110
10200 CLS:LOCATE 10,10

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10210 LINE INPUT "ENTER THE NEW FILE NAME ";DF$
10220 IF DF$="" GOTO 10200
10230 GOSUB 11110
10240 CLS:LOCATE 10,10
10250 PRINT "PRINTING INPUT DATA, PLEASE STAND BY."
10260 LPRINT DATE$,TIME$
10270 LPRINT
10280 LPRINT "FORSCOM ---- "UD$
10290 LPRINT "*****"
10300 LPRINT
10310 LPRINT "THE OUTPUT WAS DERIVED FROM THE INPUT DATA LISTED BELOW."
10320 LPRINT
10330 IF F$="n" OR F$="N" GOTO 10440
10340 LPRINT "CURRENT UNIT FILE THAT HAS BEEN INPUTED IS "FF$"."
10350 OPEN "I",#1,FF$
10360 INPUT #1,FT
10370 INPUT #1,F5
10380 INPUT #1,F6
10390 INPUT #1,F7
10400 LPRINT "          UNIT PROFILE IS ----- E1 - E4 -- "FT
10410 LPRINT "                                E5s -- "F5
10420 LPRINT "                                E6s -- "F6
10430 LPRINT "                                E7s -- "F7
10440 LPRINT "A--TOTAL 1ST TERMERS IN THE UNIT----- "CP
10450 LPRINT "B--EXPECTED PERCENTAGE OF VEL SOLDIERS---- "VE
10460 LPRINT "C--EXPECTED LENGTH OF A VEL CONTRACT IN MONTHS---- "VT
10470 LPRINT "D--EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS---- "Y3
10480 LPRINT "E--EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
10490 LPRINT "    THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT--"TT
10500 LPRINT "F--PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA---- "REE
10510 LPRINT "G--EXPECTED PROMOTION MONTH TO E5----- "PT
10520 LPRINT "H--EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5----- "PPP
10530 LPRINT "I--THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT----- "ARR
10540 LPRINT "J--THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS ----- "RP
10550 LPRINT "K--THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
10560 LPRINT "    MUST BE IN THE UNIT TO BE ELIGIBLE TO BE REASSIGNED-----"REA
10570 LPRINT "L--THE MINIMUM TIME IN MONTHS THAT A SOLDIER"
10580 LPRINT "    MUST HAVE REMAINING IN THE SERVICE TO BE REASSIGNED-----"MREA
10590 LPRINT "M--THE EXPECTED MONTHLY PERCENTAGE OF REASSIGNMENTS-----"PPREA
10600 LPRINT "N--THE NUMBER OF MONTHS SIMULATED----- "MO
10610 LPRINT "O--THE NUMBER OF REPETITIONS----- "REPS
10620 LPRINT "P--MONTHLY LISTING OF UNIT STRENGTH----- "B$
10630 LPRINT "Q--BATTALION TOTALS FOR REPLACEMENTS----- "BBN$
10640 IF B$ = "N" OR B$ = "n" THEN 10660
10650 LPRINT "    NUMBER OF COMPANIES IN THE BATTALION IS----- "COMP
10660 IF IN$="N" OR IN$="n" THEN 10890
10670 LPRINT
10680 LPRINT "NCO DATA *****":LPRINT
10690 LPRINT "A--NUMBER OF AUTHORIZED E5s---"E5
10700 LPRINT "B--THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS---"E5T
10710 LPRINT "C--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s---"AR55
10720 LPRINT "D--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6---"E5PP
10730 LPRINT "E--NUMBER OF AUTHORIZED E6s---"E6
10740 LPRINT "F--THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS---"E6T
10750 LPRINT "G--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s---"AR66
10760 LPRINT "H--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7---"E6PP
10770 LPRINT "I--NUMBER OF AUTHORIZED E7s---"E7
10780 LPRINT "J--EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS---"E7T
10790 LPRINT "K--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s---"AR77
10800 LPRINT "L--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8---"E7PP

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10810 LPRINT "M--THE EXPECTED PERCENT OF INITIAL NCO FILL---"NFF
10820 LPRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S"
10830 LPRINT "LIFETIME FOR:"
10840 LPRINT "      N--E5s ---"E5FF:E5F=E5FF*.01
10850 LPRINT "      O--E6s ---"E6FF:E6F=E6FF*.01
10860 LPRINT "      P--E7s ---"E7FF:E7F=E7FF*.01
10870 LPRINT "Q--THE MONTH TO START NCO REPLACEMENTS---"NRT
10880 LPRINT "R--THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS---"NRP
10890 LPRINT CHR$(12)
10900 LPRINT SPC(10)"COMPANY FIRST TERMER COHORT REPLACEMENT PACKAGES"
10910 LPRINT SPC(10)"-----"
10920 LPRINT
10930 LPRINT " ", " AVG      90% CONFIDENCE INTERVAL"
10940 LPRINT "MONTH      PKG SIZE  LOWER BOUNDS UPPER BOUNDS  STD DEV";
10950 LPRINT "      % UNIT STR"
10960 LPRINT
10970 ERASE PQR,STAT,MON,E6,E7,E5S,E6S,E7S,E5STAT,E6STAT,E7STAT
10980 REM ERASE STAT,MON,E5S,E6S,E7S,E5STAT,E6STAT,E7STAT
10990 GOTO 1720
11000 LOCATE 5,5:BEEP
11010 CLS
11020 PRINT "ARE YOU SURE ??????????"
11030 LOCATE 10,10
11040 PRINT "YOU WILL HAVE TO INPUT ALL NEW DATA TO START AGAIN."
11050 PRINT
11060 PRINT "IF YOU STILL WISH TO END THE SESSION,PRESS ** Y **,"
11070 PRINT
11080 PRINT "IF YOU WISH TO CONTINUE, PRESS ** N **,"
11090 D$=INPUT$(1):IF D$="N" OR D$="n" THEN 7510
11100 IF D$="Y" OR D$="y" THEN 6200 ELSE BEEP:GOTO 11000
11110 OPEN OF$ FOR OUTPUT AS #2
11120 PRINT #2,CP
11130 PRINT #2,REA
11140 PRINT #2,VE
11150 PRINT #2,VT
11160 PRINT #2,MREA
11170 PRINT #2,PPREA
11180 PRINT #2,Y3
11190 PRINT #2,TT
11200 PRINT #2,REE
11210 PRINT #2,PT
11220 PRINT #2,PPP
11230 PRINT #2,ARR
11240 PRINT #2,RP
11250 PRINT #2,MO
11260 PRINT #2,REPS
11270 PRINT #2,A$
11280 PRINT #2,BN$
11290 PRINT #2,COMP
11300 PRINT #2,IN$
11310 PRINT #2,E5
11320 PRINT #2,EST
11330 PRINT #2,AR55
11340 PRINT #2,E5PP
11350 PRINT #2,E6
11360 PRINT #2,E6T
11370 PRINT #2,AR66
11380 PRINT #2,E6PP
11390 PRINT #2,E7
11400 PRINT #2,E7T

```

```
11410 PRINT #2,AR77
11420 PRINT #2,E7PP
11430 PRINT #2,NFF
11440 PRINT #2,E5FF
11450 PRINT #2,E6FF
11460 PRINT #2,E7FF
11470 PRINT #2,NRP
11480 PRINT #2,NRT
11490 CLOSE
11500 RETURN
11510 OPEN "I",#2,DF:
11520 INPUT #2,CP
11530 INPUT #2,REA
11540 INPUT #2,VE
11550 INPUT #2,VT
11560 INPUT #2,MREA
11570 INPUT #2,PPREA
11580 INPUT #2,Y3
11590 INPUT #2,TT
11600 INPUT #2,REE
11610 INPUT #2,PT
11620 INPUT #2,PPP
11630 INPUT #2,ARR
11640 INPUT #2,RP
11650 INPUT #2,MO
11660 INPUT #2,REPS
11670 INPUT #2,A:
11680 INPUT #2,BN:
11690 INPUT #2,COMP
11700 INPUT #2,IN:
11710 INPUT #2,E5
11720 INPUT #2,E5T
11730 INPUT #2,AR55
11740 INPUT #2,E5PP
11750 INPUT #2,E6
11760 INPUT #2,E6T
11770 INPUT #2,AR66
11780 INPUT #2,E6PP
11790 INPUT #2,E7
11800 INPUT #3,E7T
11810 INPUT #2,AR77
11820 INPUT #2,E7PP
11830 INPUT #2,NFF
11840 INPUT #2,E5FF
11850 INPUT #2,E6FF
11860 INPUT #2,E7FF
11870 INPUT #2,NRP
11880 INPUT #2,NRT
11890 CLOSE
11900 RETURN
```


ANNEX IV TO APPENDIX D
EUROPE MODULE

(NOT USED)

```

10 REM *****
20 REM **
30 REM **
40 REM **
50 REM *****
60 REM **
70 REM ** this is the code for the europe module.
80 REM **
90 REM *****
100 CLS
110 CLEAR
120 DIM PQR(125,2)
130 DIM STAT(125,2)
140 DIM MON(251)
150 DIM E5(75,2)
160 DIM E6(50,2)
170 DIM E7(30,2)
180 DIM E5S(250)
190 DIM E6S(250)
200 DIM E7S(250)
210 DIM ST5(125)
220 DIM ST6(125)
230 DIM ST7(125)
240 ' $DYNAMIC
250 DIM UPOE(1,1)
260 PRINT:PRINT:PRINT:PRINT
270 PRINT "THE DATA THAT YOU INPUT WILL BE AUTOMATICALLY STORED TO A FILE"
280 PRINT
290 PRINT "THAT YOU NAME SO THAT IT CAN BE USED AGAIN IN THE FUTURE."
300 PRINT
310 PRINT "REMEMBER, IF YOU USE THE SAME FILE NAME AS A PREVIOUS FILE"
320 PRINT
330 PRINT "THAT YOU INPUT, THE NEW DATA WILL BE SAVED AND THE OLD LOST."
340 PRINT:PRINT:PRINT:PRINT
350 LINE INPUT "ENTER THE NAME OF THE DATA FILE ";DF$
360 IF DF$="" GOTO 350
370 CLS:LOCATE 10,10
380 PRINT "IS "DF$" AN EXISTING FILE OR A NEW FILE ?"
390 LOCATE 15,15:PRINT "ENTER * E * FOR AN EXISTING OR * N * FOR NEW FILE."
400 CF$=INPUT$(1)
410 IF CF$="E" OR CF$="e" THEN 430
420 IF CF$="N" OR CF$="n" THEN 430 ELSE BEEP:GOTO 370
430 CLS:PRINT:PRINT:PRINT:PRINT:PRINT:PRINT
440 PRINT "ENTER THE TOE, UNIT DESCRIPTION OR BOTH FOR THE TYPE OF UNIT."
450 PRINT:PRINT
460 LINE INPUT "YOU WILL INPUT - ";UD$
470 IF CF$="N" OR CF$="n" THEN 500
480 IF CF$="E" OR CF$="e" THEN GOSUB 15260
490 GOTO 11110
500 CLS:PRINT
510 INPUT "ENTER THE TOTAL 1ST TERMERS IN THE UNIT ";CP
520 PRINT
530 INPUT "ENTER THE EXPECTED PERCENT OF FILL ";EF
540 CPP=CINT((EF*.01)*CP)
550 PRINT
560 INPUT "ENTER THE EXPECTED PERCENTAGE OF VEL SOLDIERS ";VE
570 PRINT
580 IF VE = 0 GOTO 640
590 VV=VE*.01
600 VEL=CINT(CPP*VV)

```

```

610 INPUT "ENTER THE LENGTH OF A VEL CONTRACT IN MONTHS ";VT
620 PRINT
630 IF VE=100 THEN TT=VT-36:GOTO 1030
640 PRINT
650 INPUT "ENTER THE TOTAL PERCENTAGE OF SOLDIERS EXPECTED FOR JET ";JE
660 TJ=JE*.01:PJ=CINT(CPP*TJ)
670 PRINT
680 IF JE = 0 AND VE = 0 GOTO 830
690 IF JE = 0 GOTO 820
700 INPUT "ENTER THE PERCENTAGE EXPECTED FOR 3 YR JET ENLISTMENTS ";J33
710 J3Y=J33*.01:J3=CINT(J3Y*PJ):J4=PJ-J3
720 PRINT
730 PRINT "THE REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR JET ENLISTEES."
740 PRINT "*****"
750 PRINT
760 PRINT
770 INPUT "ENTER THE TOUR LENGTH FOR JET SOLDIERS IN MONTHS ";JET
780 PRINT
790 PRINT "ENTER THE PERCENTAGE OF JET SOLDIERS THAT ARE EXPECTED TO"
800 INPUT "EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT ";CA
810 RC=CA*.01:PRINT
820 PRINT "OF THE REMAINING SOLDIERS:"
830 INPUT "ENTER THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS ";Y3
840 YY=Y3*.01
850 YR3=CINT((CPP-VEL-PJ)*YY)
860 IF Y3=100 GOTO 920
870 YR4=CPP-VEL-YR3-PJ
880 PRINT
890 PRINT "THE REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR ENLISTEES."
900 PRINT "*****"
910 PRINT
920 PRINT
930 PRINT "ENTER THE PERCENTAGE OF UNACCOMPANIED SOLDIERS THAT ARE EXPECTED"
940 INPUT "TO EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT ";CCA
950 RRC=CCA*.01:PRINT
960 PRINT
970 INPUT "ENTER THE TOUR FOR UNACCOMPANIED SOLDIERS IN MONTHS ";ST
980 PRINT
990 PRINT "ENTER THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
1000 INPUT "THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT ";TT
1010 CLS
1020 PRINT
1030 PRINT "ENTER THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
1040 PRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
1050 PRINT
1060 PRINT:INPUT "UNACCOMPANIED 1st TERMERS ";REE
1070 PRINT:INPUT "ENTER THE AVERAGE LENGTH IN MONTHS ";AE
1080 PRINT
1090 PRINT:INPUT "JET SOLDIERS ";JREE
1100 PRINT:INPUT "ENTER THE AVERAGE LENGTH IN MONTHS ";JAE
1110 JRE=JREE*.01
1120 RE=REE*.01
1130 PRINT
1140 PRINT "ENTER THE MINIMUM TIME IN MONTHS THAT A SOLDIER MUST HAVE"
1150 INPUT "TO ROTATE BACK TO CONUS ";MT
1160 PRINT
1170 INPUT "ENTER THE EXPECTED PROMOTION MONTH TO E5 ";PT
1180 PRINT
1190 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5 ";PPP
1200 PP=PPP*.01

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1210 PRINT
1220 INPUT "ENTER THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT ";ARR
1230 AR=ARR*.01
1240 PRINT
1250 INPUT "ENTER THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS ";RP
1260 CLS:PRINT:PRINT:PRINT:PRINT:PRINT
1270 PRINT
1280 PRINT "UNDER CURRENT POLICY, THE UNIT WILL SPEND 12 MONTHS IN"
1290 PRINT "CONUS TRAINING BEFORE DEPLOYING OVERSEAS. REPLACEMENTS"
1300 PRINT "ARE PROVIDED AT THE ROTATION POINT."
1310 RT=12
1320 MJ=JET+TT+RT:PRINT:PRINT:PRINT
1330 PRINT "PRESS ANY KEY TO CONTINUE"
1340 QQS=INKEY$: IF QQS="" THEN 1340
1350 CLS:LOCATE 10,10
1360 PRINT "DO YOU WANT BATTALION TOTALS FOR REPLACEMENTS ?"
1370 LOCATE 15,15
1380 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
1390 BN$ = INPUT$(1)
1400 IF BN$ = "N" OR BN$ = "n" THEN 1480
1410 IF BN$ = "Y" OR BN$ = "y" THEN 1420 ELSE BEEP:GOTO 1370
1420 CLS:PRINT:PRINT:PRINT:PRINT:PRINT
1430 PRINT "COMPANIES WILL START UP EVERY 12 MONTHS."
1440 PRINT:PRINT:PRINT
1450 PRINT "ENTER THE NUMBER OF COMPANIES IN THE BATTALION."
1460 INPUT "ENTER EITHER 3, 4, OR 5 ";COMP
1470 IF COMP<3 OR COMP>5 GOTO 1450
1480 CLS
1490 LOCATE 10,10
1500 PRINT "DO YOU WANT TO INPUT NCO DATA?"
1510 LOCATE 15,15
1520 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
1530 IN$ = INPUT$(1)
1540 IF IN$="N" OR IN$="n" THEN 2130
1550 IF IN$ = "Y" OR IN$ = "y" THEN 1560 ELSE BEEP:GOTO 1510
1560 CLS:PRINT
1570 INPUT "ENTER THE NUMBER OF AUTHORIZED E5s ";SE5
1580 PRINT
1590 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS ";E5T
1600 PRINT
1610 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s, ";AR55
1620 AR5=AR55*.01
1630 PRINT
1640 INPUT "ENTER THE EXPECTED PROMOTION PERCENTAGE OF E5s TO E6 ";E5PP
1650 PRINT:E5P=E5PP*.01
1660 INPUT "ENTER THE NUMBER OF AUTHORIZED E6s ";SE6
1670 PRINT
1680 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS ";E6T
1690 PRINT
1700 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s, ";AR66
1710 AR6=AR66*.01
1720 PRINT
1730 INPUT "ENTER THE EXPECTED PROMOTION PERCENTAGE OF E6s TO E7 ";E6PP
1740 PRINT:E6P=E6PP*.01
1750 INPUT "ENTER THE NUMBER OF AUTHORIZED E7s ";SE7
1760 PRINT
1770 INPUT "ENTER THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS ";E7T
1780 PRINT
1790 INPUT "ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s, ";AR77
1800 AR7=AR77*.01

```

```

1810 PRINT
1820 INPUT "ENTER THE EXPECTED PROMOTION PERCENTAGE OF E7s TO E8 ";E7PP
1830 PRINT:PRINT:E7P=E7PP*.01
1840 PRINT "ENTER THE EXPECTED PERCENTAGE OF NCOs THAT WILL CHOOSE AN"
1850 INPUT "ALL OTHERS TOUR RATHER THAN AN ACCOMPANIED TOUR ";AOTT
1860 AOT = AOTT*.01:PRINT
1870 INPUT "ENTER THE LENGTH OF AN ALL OTHERS TOUR ";LOT:PRINT
1880 INPUT "ENTER THE EXPECTED INITIAL PERCENT OF NCO FILL ";NFF:NFF=NFF*.01
1890 SSE5=CINT(SE5*NFF):SSE6=CINT(SE6*NFF):SSE7=CINT(SE7*NFF)
1900 SE5O=CINT(AOT*SSE5)
1910 SE5A=SSE5-SE5O
1920 SE6O=CINT(AOT*SSE6)
1930 SE6A=SSE6-SE6O
1940 SE7O=CINT(AOT*SSE7)
1950 SE7A=SSE7-SE7O
1960 PRINT
1970 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
1980 PRINT "LIFETIME FOR:"
1990 PRINT
2000 INPUT "          E5s      ";E5FF:E5F=E5FF*.01
2010 INPUT "          E6s      ";E6FF:E6F=E6FF*.01
2020 INPUT "          E7s      ";E7FF:E7F=E7FF*.01
2030 PRINT
2040 PRINT "ENTER THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
2050 PRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
2060 INPUT "ENTER THE EXPECTED PERCENT OF NCO EXTENSIONS ";NREE
2070 PRINT:INPUT "ENTER THE AVERAGE LENGTH IN MONTHS ";NAE
2080 NRE=NREE*.01
2090 PRINT
2100 INPUT "ENTER THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS ";NRP
2110 PRINT
2120 INPUT "ENTER THE MONTH TO START NCO REPLACEMENTS ";NRT
2130 CLS:PRINT
2140 INPUT "ENTER THE NUMBER OF MONTHS TO SIMULATE ";MO
2150 PRINT
2160 INPUT "HOW MANY REPETITIONS--A MINIMUM OF 30 ARE REQUIRED ";REPS
2170 CLS:LOCATE 10,10
2180 PRINT "DO YOU WANT A MONTHLY LISTING OF UNIT STRENGTH,YES OR NO"
2190 LOCATE 15,15
2200 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
2210 A$=INPUT$(1)
2220 IF A$ = "N" OR A$ = "n" THEN 2240
2230 IF A$ = "Y" OR A$ = "y" THEN 2240 ELSE BEEP:GOTO 2170
2240 CLS:PRINT:PRINT:PRINT:PRINT
2250 PRINT "DO YOU WANT TO USE A UNIT'S PRESENT PROFILE THAT YOU "
2260 PRINT"CREATED IN A FILE ?  ENTER * Y * FOR YES, * N * FOR NO."
2270 F$=INPUT$(1)
2280 IF F$ = "N" OR F$ = "n" THEN 2320
2290 IF F$ = "Y" OR F$ = "y" THEN 2300 ELSE BEEP:GOTO 2240
2300 CLS:PRINT:PRINT:LINE INPUT "ENTER THE FILE NAME ";FF$
2310 IF FF$="" THEN BEEP : GOTO 2300
2320 GOTO 11110
2330 FOR Z = 1 TO REPS
2340 REM"THIS PROGRAM IS CURRENTLY SET UP TO BE COMPILED IN THE BASIC COMPILER"
2350 REM"IN ORDER TO RUN THIS PROGRAM USING THE BASIC INTERPRETER, YOU MUST"
2360 REM"REMOVE THE REM FROM LINES 2450 - 2570.  YOU MUST THEN REMOVE THE"
2370 REM"REM FROM LINE 15130 AND INSERT REM IN LINE 15120."
2380 REM"THE PROGRAM WILL NOW RUN.  HOWEVER, IF YOU WANT TO RECOMPILE"
2390 REM"THE PROGRAM, YOU MUST REVERSE THE ABOVE PROCESS."
2400 ERASE E5

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```

2410 ERASE E6
2420 ERASE E7
2430 ERASE FOR
2440 ERASE UPOR
2450 REM IF Z>1 GOTO 2580
2460 REM DIM STAT(125,2)
2470 REM DIM MON(251)
2480 REM DIM E58(250)
2490 REM DIM E68(250)
2500 REM DIM E78(250)
2510 REM DIM ST5(125)
2520 REM DIM ST6(125)
2530 REM DIM ST7(125)
2540 REM DIM POR(125,2)
2550 REM DIM E5(75,2)
2560 REM DIM E6(50,2)
2570 REM DIM E7(30,2)
2580 IF F1="Y" OR F1="Y" THEN RT=0 ELSE RT=12
2590 RANDOMIZE TIMER
2600 CLS
2610 LOCATE 10,10
2620 PRINT "CURRENTLY ON REPETITION "Z" OF "REPS" REPETITIONS "
2630 IF F1 = "Y" OR F1 = "Y" THEN 2960 ELSE 2640
2640 FOR I = 0 TO VEL-1
2650 POR(I,1)=1
2660 POR(I,2)=VT-TT
2670 NEXT I
2680 FOR A = VEL TO (VEL+YR3-1)
2690 POR(A,1)=2
2700 POR(A,2)=36-TT
2710 NEXT A
2720 FOR C=VEL+YR3 TO CPP-PJ-1
2730 POR(C,1)=3
2740 POR(C,2)=48-TT
2750 NEXT C
2760 IF 36-TT<MJ THEN JJ3=MJ-TT ELSE JJ3=36-TT
2770 FOR A=VEL+YR3+YR4 TO CPP-J4-1
2780 POR(A,1)=4:POR(A,2)=JJ3
2790 NEXT A
2800 IF 48-TT<MJ THEN JJ4=MJ-TT ELSE JJ4=48-TT
2810 FOR A=VEL+YR3+YR4+J3 TO CPP-1
2820 POR(A,1)=5:POR(A,2)=JJ4:NEXT A
2830 FOR D=0 TO SSE5-1
2840 E5(D,1)=1
2850 IF D<SE5A THEN E5(D,2)=E5T+RT ELSE E5(D,2)=LOT+RT
2860 NEXT D
2870 FOR D = 0 TO SSE6-1
2880 E6(D,1)=1
2890 IF D<SE6A THEN E6(D,2)=E6T+RT ELSE E6(D,2)=LOT+RT
2900 NEXT D
2910 FOR D = 0 TO SSE7-1
2920 E7(D,1)=1
2930 IF D<SE7A THEN E7(D,2)=E7T+RT ELSE E7(D,2)=LOT+RT
2940 NEXT D
2950 GOTO 3360
2960 REM UNIT INPUT MODULE
2970 IF Z=1 GOTO 3030
2980 OPEN "I",#1,FF1
2990 INPUT #1,FT
3000 INPUT #1,F5

```

```

3010 INPUT #1,F6
3020 INPUT #1,F7
3030 REDIM UPQR(FT,4)
3040 FOR T=1 TO FT+1
3050 FOR TT = 1 TO 4
3060 IF EOF(1) THEN CLOSE:GOTO 3120
3070 INPUT #1,A
3080 IF A=99 GOTO 3120
3090 UPQR(T,TT) = A
3100 NEXT TT
3110 NEXT T
3120 FOR T=1 TO F5+1
3130 IF EOF(1) THEN CLOSE:GOTO 3200
3140 INPUT #1,A
3150 IF A=99 GOTO 3200
3160 INPUT #1,A
3170 IF A=99 GOTO 3200
3180 E5(T,1) = 1:E5(T,2) =A
3190 NEXT T
3200 FOR T=1 TO F6+1
3210 IF EOF(1) THEN CLOSE:GOTO 3280
3220 INPUT #1,A
3230 IF A=99 GOTO 3280
3240 INPUT #1,A
3250 IF A=99 GOTO 3280
3260 E6(T,1) = 1:E6(T,2)=A
3270 NEXT T
3280 FOR T=1 TO F7+1
3290 IF EOF(1) THEN CLOSE:GOTO 3360
3300 INPUT #1,A
3310 IF A=99 THEN CLOSE:GOTO 3360
3320 INPUT #1,A
3330 IF A=99 THEN CLOSE:GOTO 3360
3340 E7(T,1) = 1:E7(T,2)=A
3350 NEXT T
3360 FOR B=1 TO MO
3370 LOCATE 15,15
3380 PRINT "CURRENTLY ON MONTH "B" OF A "MO" MONTH CYCLE."
3390 VLOSS=0
3400 Y3LOSS=0
3410 Y4LOSS=0
3420 J3LOSS=0
3430 J4LOSS=0
3440 E5LOSS=0
3450 E6LOSS=0
3460 E7LOSS=0
3470 RLOSS=0
3480 INLOSS=0
3490 INNUM=0
3500 VNUM=0
3510 Y3NUM=0
3520 Y4NUM=0
3530 J3NUM=0
3540 J4NUM=0
3550 E5NUM=0
3560 E6NUM=0
3570 E7NUM=0
3580 RNUM=0
3590 IF F$ = "N" OR F$ = "n" OR MO > 48 THEN 3790
3600 FOR D=1 TO FT

```



```

3610 IF UPQR(D,2)=0 GOTO 3780
3620 INNUM=INNUM+1
3630 UPQR(D,2)=UPQR(D,2)-1
3640 UPQR(D,4)=UPQR(D,4)-1
3650 IF UPQR(D,2)=0 THEN GOSUB 8300 ELSE 3670
3660 GOTO 3780
3670 RD=RND
3680 IF RD>AR GOTO 3720
3690 UPQR(D,2)=0
3700 INNUM=INNUM-1:INLOSS=INLOSS+1
3710 GOTO 3780
3720 IF UPQR(D,4)>UPQR(D,3)-PT THEN 3780
3730 RD=RND
3740 IF RD>PP GOTO 3780
3750 GOSUB 9700
3760 INNUM=INNUM-1:INLOSS=INLOSS+1
3770 UPQR(D,2)=0
3780 NEXT D
3790 IF CP >=CPP THEN JJJ=CP ELSE JJJ=CPP
3800 FOR J=0 TO JJJ-1
3810 IF PQR(J,1)=0 GOTO 4040
3820 IF PQR(J,1)=2 OR PQR(J,1)=7 GOTO 4050
3830 IF PQR(J,1)=3 OR PQR(J,1)=8 GOTO 4240
3840 IF PQR(J,1)=4 OR PQR(J,1)=9 GOTO 4540
3850 IF PQR(J,1)=5 OR PQR(J,1)=10 GOTO 4730
3860 IF PQR(J,1)=15 GOTO 4430
3870 PQR(J,2)=PQR(J,2)-1
3880 VNUM=VNUM+1
3890 IF PQR(J,1)=1 THEN 3900 ELSE 3920
3900 IF PQR(J,2)=0 OR PQR(J,2)=VT-TT-ST-PT THEN GOSUB 8580 ELSE 3940
3910 GOTO 4940
3920 IF PQR(J,2)=0 OR PQR(J,2)=VT-TT-ST THEN GOSUB 8580 ELSE GOTO 3940
3930 GOTO 4940
3940 RD = RND
3950 IF RD>AR GOTO 3980
3960 GOSUB 8540
3970 GOTO 4940
3980 IF PQR(J,2) > VT-PT GOTO 4940
3990 RD = RND
4000 IF RD > PP GOTO 4240
4010 IF IN$="N" OR IN$="n" THEN 4030
4020 GOSUB 9530
4030 GOSUB 8540
4040 GOTO 4940
4050 REM PQR (J,1)=2 OR 7
4060 PQR (J,2)=PQR (J,2)-1
4070 Y3NUM=Y3NUM+1
4080 IF PQR(J,1)=7 GOTO 4110
4090 IF PQR(J,2)=0 OR PQR(J,2)=36-TT-RT-ST THEN GOSUB 8790 ELSE GOTO 4130
4100 GOTO 4940
4110 IF PQR(J,2)=0 OR PQR(J,2)=36-TT-ST THEN GOSUB 8790 ELSE GOTO 4130
4120 GOTO 4940
4130 RD=RND
4140 IF RD>AR GOTO 4170
4150 GOSUB 8750
4160 GOTO 4940
4170 IF PQR(J,2) > 36-PT GOTO 4940
4180 RD=RND
4190 IF RD > PP GOTO 4940
4200 IF IN$="N" OR IN$="n" THEN 4220

```

```

4210 GOSUB 9530
4220 GOSUB 8750
4230 GOTO 4940
4240 REM PQR(J,1)=3 OR 8
4250 PQR(J,2)=PQR(J,2)-1
4260 Y4NUM=Y4NUM+1
4270 IF PQR(J,1)=8 GOTO 4300
4280 IF PQR(J,2)=0 OR PQR(J,2)=48-TT-RT-ST THEN GOSUB 9000 ELSE GOTO 4320
4290 GOTO 4940
4300 IF PQR(J,2)=0 OR PQR(J,2)=48-TT-ST THEN GOSUB 9000 ELSE GOTO 4320
4310 GOTO 4940
4320 RD=END
4330 IF RD > AR GOTO 4360
4340 GOSUB 8960
4350 GOTO 4940
4360 IF PQR(J,2)>48-PT GOTO 4940
4370 RD=END
4380 IF RD > PP GOTO 4940
4390 IF IN$="N" OR IN$="n" THEN 4410
4400 GOSUB 9530
4410 GOSUB 8960
4420 GOTO 4940
4430 PQR(J,2)=PQR(J,2)-1
4440 RNUM=RNUM+1
4450 IF PQR(J,2)=0 THEN 4500
4460 RD=END
4470 IF RD > PP GOTO 4940
4480 IF IN$="N" OR IN$="n" THEN 4500
4490 GOSUB 9530
4500 RNUM=RNUM-1
4510 RLOSS=RLOSS+1
4520 PQR(J,1)=0
4530 GOTO 4940
4540 REM PQR(J,1)=4 OR 9
4550 PQR(J,2)=PQR(J,2)-1
4560 J3NUM=J3NUM+1
4570 IF PQR(J,2)=0 THEN GOSUB 9210 ELSE GOTO 4590
4580 GOTO 4940
4590 RD=END
4600 IF RD>AR GOTO 4630
4610 GOSUB 9170
4620 GOTO 4940
4630 IF PQR(J,1)=4 GOTO 4660
4640 IF PQR(J,2)>JET+TT-PT GOTO 4940
4650 GOTO 4670
4660 IF PQR(J,2)>JJ3+TT-PT GOTO 4940
4670 RD=END
4680 IF RD>PP GOTO 4940
4690 IF IN$="N" OR IN$="n" GOTO 4710
4700 GOSUB 9530
4710 GOSUB 9170
4720 GOTO 4940
4730 REM PQR(J,1)=5 OR 10
4740 PQR(J,2)=PQR(J,2)-1
4750 J4NUM=J4NUM+1
4760 IF PQR(J,1)=10 THEN 4790 ELSE GOTO 4770
4770 IF PQR(J,2)=48-MJ OR PQR(J,2)=0 THEN GOSUB 9390 ELSE GOTO 4800
4780 GOTO 4940
4790 IF PQR(J,2)=0 OR PQR(J,2)=48-TT-JET THEN GOSUB 9390 ELSE 4800
4800 RD=END

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4810 IF ED>AK GOTO 4840
4820 GOSUB 9340
4830 GOTO 4940
4840 IF PQR(J,1)=5 GOTO 4870
4850 IF PQR(J,2)>48-PT GOTO 4940
4860 GOTO 4880
4870 IF PQR(J,2)>JJ4+TT-PT GOTO 4940
4880 ED=RND
4890 IF ED>PF GOTO 4940
4900 IF IN1="N" OR IN1="n" GOTO 4920
4910 GOSUB 9530
4920 GOSUB 9340
4930 GOTO 4940
4940 NEXT J
4950 TLOSS=TLOSS+VLOSS+Y3LOSS+Y4LOSS+RLOSS+J3LOSS+J4LOSS+INLOSS
4960 USTR=VNUM+Y3NUM+Y4NUM+RNUM+J3NUM+J4NUM+INNUM
4970 IF USTR>CP THEN ILOSS=0 ELSE ILOSS=CP-USTR
4980 IF B<RT GOTO 5050
4990 IF ILOSS<=0 THEN ILOSS=0
5000 IF B MOD RP=0 THEN Q=B/RP
5010 IF B MOD RP=0 THEN IL=ILOSS*ILOSS
5020 IF B MOD RP=0 THEN STAT(Q,1)=STAT(Q,1)+ILOSS
5030 IF B MOD RP=0 THEN STAT(Q,2)=STAT(Q,2)+IL:ILOSS=0
5040 IF B MOD RP=0 THEN GOSUB 9770
5050 IF B >250 GOTO 5080
5060 USTR=VNUM+Y3NUM+Y4NUM+RNUM+J3NUM+J4NUM+INNUM
5070 MON(B)=MON(B)+USTR
5080 IF IN1="N" OR IN1="n" THEN 6270
5090 FOR K=0 TO 75
5100 IF E5(K,1)=0 GOTO 5900
5110 E5NUM=E5NUM+1:E5(K,2)=E5(K,2)-1
5120 IF E5(K,1)=1 THEN 5130 ELSE 5170
5130 IF E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5140 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5150 GOSUB 10220
5160 GOTO 5900
5170 IF E5(K,1)=2 THEN 5180 ELSE 5220
5180 XX=VT-TT-ST-RT
5190 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5200 GOSUB 10220
5210 GOTO 5900
5220 IF E5(K,1)=2.5 THEN 5230 ELSE 5280
5230 XX=VT-TT-ST
5240 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5250 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5260 GOSUB 10220
5270 GOTO 5900
5280 IF E5(K,1)=3 THEN 5290 ELSE 5340
5290 XX=36-TT-ST-RT
5300 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5310 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5320 GOSUB 10220
5330 GOTO 5900
5340 IF E5(K,1)=3.5 THEN 5350 ELSE 5400
5350 XX=36-TT-ST
5360 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5370 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5380 GOSUB 10220
5390 GOTO 5900
5400 IF E5(K,1)=4 THEN 5410 ELSE 5460

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5410 XX=48-TT-ST-RT
5420 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5430 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5440 GOSUB 10220
5450 GOTO 5900
5460 IF E5(K,1)=4.5 THEN 5470 ELSE 5520
5470 XX=48-TT-ST
5480 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5490 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5500 GOSUB 10220
5510 GOTO 5900
5520 IF E5(K,1)=5 THEN 5530 ELSE 5560
5530 IF E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5540 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5550 GOSUB 10220:GOTO 5900
5560 IF E5(K,1)=5.5 THEN 5570 ELSE 5600
5570 IF E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5580 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5590 GOSUB 10220:GOTO 5900
5600 IF E5(K,1)=6 THEN 5610 ELSE 5660
5610 XX=MJ-JET-ST-RT
5620 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5630 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5640 GOSUB 10220
5650 GOTO 5900
5660 IF E5(K,1)=6.5 THEN 5670 ELSE 5720
5670 XX=48-TT-JET
5680 IF E5(K,2)=XX OR E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5690 IF E5(K,1)=10 OR E5(K,1)=11 GOTO 5900
5700 GOSUB 10220
5710 GOTO 5900
5720 IF E5(K,1)=10 THEN 5730 ELSE 5750
5730 IF E5(K,2)=0 THEN GOSUB 10220 ELSE 5900
5740 GOTO 5900
5750 IF E5(K,2)=0 THEN GOSUB 10140 ELSE 5790
5760 IF E5(K,1)=10 GOTO 5900
5770 GOSUB 10220
5780 GOTO 5900
5790 RD=RND
5800 IF RD>AR5 GOTO 5830
5810 GOSUB 10220
5820 GOTO 5900
5830 RD=RND
5840 IF RD>ESP GOTO 5900
5850 FOR M=0 TO 30
5860 IF E6(M,1)>0 GOTO 5890
5870 E6(M,1)=1:E6(M,2)=E5(K,2)+1:E5NUM=E5NUM-1:E5(K,1)=0
5880 GOTO 5900
5890 NEXT M
5900 NEXT K
5910 FOR L=0 TO 30
5920 IF E6(L,1)=0 GOTO 6070
5930 E6NUM=E6NUM+1:E6(L,2)=E6(L,2)-1
5940 IF E6(L,2)=0 THEN GOSUB 10260 ELSE 5960
5950 GOTO 6070
5960 RD=RND
5970 IF RD>AR6 GOTO 6000
5980 GOSUB 10310
5990 GOTO 6070
6000 RD=RND

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6010 IF RD>E6P GOTO 6070
6020 FOR K=0 TO 30
6030 IF E7(K,1) >0 GOTO 6060
6040 E7(K,1)=1:E7(K,2)=E6(L,2)+1:E6NUM=E6NUM-1:E6(L,1)=0
6050 GOTO 6070
6060 NEXT K
6070 NEXT L
6080 FOR M=0 TO 30
6090 IF E7(M,1)=0 GOTO 6200
6100 E7NUM=E7NUM+1:E7(M,2)=E7(M,2)-1
6110 IF E7(M,2)=0 THEN GOSUB 10350 ELSE 6130
6120 GOTO 6200
6130 RD=RND
6140 IF RD>AR7 GOTO 6170
6150 GOSUB 10400
6160 GOTO 6200
6170 RD=RND
6180 IF RD>E7P GOTO 6200
6190 E7(M,1)=0:E7NUM=E7NUM-1
6200 NEXT M
6210 IF B<RT GOTO 6240
6220 IF B MOD NRP=0 THEN GOSUB 10440
6230 IF B>250 GOTO 6270
6240 E5S(B)=E5S(B)+E5NUM
6250 E6S(B)=E6S(B)+E6NUM
6260 E7S(B)=E7S(B)+E7NUM
6270 NEXT B
6280 IF Z=REPS THEN GOTO 6290 ELSE GOTO 8240
6290 CLS:BEEP:LOCATE 10,10
6300 PRINT "PRINTING OF OUTPUT IS IN PROCESS"
6310 IF F1="Y" OR F1="y" GOTO 6370
6320 IF RP=3 THEN AA=4
6330 IF RP=4 THEN AA=3
6340 IF RP=6 THEN AA=2
6350 C=RT
6360 GOTO 6390
6370 C=RP
6380 AA=1
6390 FOR T=AA TO MO/RP
6400 V=(Z*STAT(T,2)-STAT(T,1) 2)/(Z*(Z-1))
6410 CI = (1.645*(SQR(V)))/SQR(Z)
6420 AVE = STAT(T,1)/Z
6430 LWBND = AVE - CI
6440 UPBND = AVE + CI
6450 PSTR=((CP-CINT(AVE))/CP)*100
6460 FCA=CINT(AVE)
6470 LPRINT USING "###";C;
6480 LPRINT " "
6490 LPRINT USING "### " ;FCA;
6500 LPRINT " "
6510 LPRINT USING "###.## " ;LWBND;UPBND;SQR(V)/SQR(Z);PSTR
6520 C=C+RP
6530 NEXT T
6540 IF IN$="N" OR IN$="n" THEN 6830
6550 LPRINT CHR$(12)
6560 LPRINT SPC(5)"MINIMUM NCO STRENGTH BEFORE REPLACEMENTS"
6570 LPRINT SPC(5)"-----"
6580 LPRINT
6590 LPRINT "MONTH","E5 STR","E6 STR","E7 STR"
6600 LPRINT

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```

6610 IF F1="Y" OR F1="y" GOTO 6670
6620 CC=RT
6630 IF NRP=3 THEN AA=4
6640 IF NRP=4 THEN AA=3
6650 IF NRP=6 THEN AA=2
6660 GOTO 6690
6670 CC=NRP
6680 AA=1
6690 FOR TQ=AA TO MO/NRP
6700 AV5=CINT(ST5(TQ)/Z)
6710 AV6=CINT(ST6(TQ)/Z)
6720 AV7=CINT(ST7(TQ)/Z)
6730 IF AV5>SE5 THEN TT1="*" ELSE TT1=" "
6740 IF AV6>SE6 THEN T61="*" ELSE T61=" "
6750 IF AV7>SE7 THEN T71="*" ELSE T71=" "
6760 LPRINT USING "###";CC;LPRINT " "
6770 LPRINT USING "###";AV5;LPRINT "TT1";LPRINT " "
6780 LPRINT USING "###";AV6;LPRINT "T61";LPRINT " "
6790 LPRINT USING "###";AV7;LPRINT "T71";LPRINT " "
6800 CC=CC+NRP
6810 NEXT TQ
6820 LPRINT:LPRINT:LPRINT:LPRINT "* ---- INDICATES OVERSTRENGTH"
6830 IF A1="N" OR A1="n" THEN 7150
6840 IF MO > 250 THEN MOO = 250 ELSE MOO=MO
6850 LPRINT CHR$(12)
6860 LPRINT SPC(20)"MONTHLY UNIT STRENGTH BY GRADE"
6870 LPRINT SPC(20)"-----"
6880 LPRINT " "
6890 LPRINT "MONTH" TAB(12) "E1-4" TAB(24) "E5" TAB(36) "E6" TAB(48) "E7";
6900 LPRINT TAB(36) "% UNIT STR/NCO STR"
6910 LPRINT " "
6920 FOR Q=1 TO MOO
6930 AV=MON(Q)/Z:US=CINT(AV)
6940 E5NU=CINT(E5(Q)/Z)
6950 E6NU=CINT(E6(Q)/Z)
6960 E7NU=CINT(E7(Q)/Z)
6970 IF E5NU>SE5 THEN TT1="*" ELSE TT1=" "
6980 IF E6NU>SE6 THEN T61="*" ELSE T61=" "
6990 IF E7NU>SE7 THEN T71="*" ELSE T71=" "
7000 TST=CP+SE5+SE6+SE7
7010 TS=US+E5NU+E6NU+E7NU:PPT=(TS/TST)*100
7020 IF IN1="N" OR IN1="n" THEN 7050
7030 NST=SE5+SE6+SE7
7040 NS=E5NU+E6NU+E7NU:NT=(NS/NST)*100
7050 LPRINT USING "###";Q;LPRINT TAB(12);
7060 LPRINT USING "###";US;LPRINT TAB(24);
7070 LPRINT USING "###";E5NU;LPRINT "TT1";LPRINT TAB(36);
7080 LPRINT USING "###";E6NU;LPRINT "T61";LPRINT TAB(48);
7090 LPRINT USING "###";E7NU;LPRINT "T71";LPRINT TAB(60);
7100 LPRINT USING "###.##";PPT;
7110 LPRINT " / ";
7120 LPRINT USING "###.##";NT
7130 NEXT Q
7140 LPRINT:LPRINT:LPRINT:LPRINT "* ---- INDICATES OVERSTRENGTH"
7150 IF BN1="N" OR BN1="n" THEN 8250
7160 IF F1="Y" OR F1="y" THEN 8250
7170 IF RP=3 THEN 7180 ELSE GOTO 7190
7180 AA=4:BB=8:CC=12:DD=16:EE=20:GOTO 7250
7190 IF RP=4 THEN 7200 ELSE GOTO 7210
7200 AA=3:BB=6:CC=9:DD=12:EE=15:GOTO 7250

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7210 IF RP=6 THEN 7240 ELSE GOTO 7220
7220 LPRINT "BATTALION STRENGTHS UNABLE TO BE CALCULATED FOR ROTATION."
7230 GOTO 8250
7240 AA=2:BB=4:CC=6:DD=8:EE=10
7250 LPRINT CHR$(12)
7260 LPRINT SPC(10)"BATTALION FIRST TERMER COHORT REPLACEMENT PACKAGES"
7270 LPRINT SPC(10)"-----":LPRINT
7280 LPRINT TAB(22) "90% CONFIDENCE INTERVAL"
7290 LPRINT "MONTH" TAB(8) "CO" TAB(12) "PKG SIZE" TAB(24) "LOWER B";
7300 LPRINT TAB(36) "UPPER B" TAB(48) "STD DEV" TAB(59) "% UNIT STR"
7310 LPRINT
7320 C=HT
7330 FCA=0:ACA=0:BCA=0:GCA=0:DCA=0
7340 FOR T=AA TO MO/EP
7350 V=(Z*STAT(T,2)-STAT(T,1) 2)/(Z*(Z-1))
7360 CI = (1.645*(SQR(V)))/SQR(Z)
7370 AVE = STAT(T,1)/Z
7380 LWBND = AVE - CI
7390 UPBND = AVE + CI
7400 PSTR=((CP-CINT(AVE))/CP)*100
7410 FCA=CINT(AVE)
7420 IF T=BB GOTO 7800
7430 ZA=T-AA
7440 VA=(Z*STAT(ZA,2)-STAT(ZA,1) 2)/(Z*(Z-1))
7450 ACI = (1.645*(SQR(VA)))/SQR(Z)
7460 AAVE = STAT(ZA,1)/Z
7470 LWA = AAVE - ACI
7480 UPA = AAVE + ACI
7490 PSA=((CP-CINT(AAVE))/CP)*100
7500 ACA=CINT(AAVE)
7510 IF T=CC GOTO 7800
7520 BZA=T-BB
7530 VB=(Z*STAT(BZA,2)-STAT(BZA,1) 2)/(Z*(Z-1))
7540 BCI = (1.645*(SQR(VB)))/SQR(Z)
7550 BAVE = STAT(BZA,1)/Z
7560 LWB = BAVE - BCI
7570 UPB = BAVE + BCI
7580 PSB=((CP-CINT(BAVE))/CP)*100
7590 BCA=CINT(BAVE)
7600 IF COMP = 3 GOTO 7800
7610 IF T=DD GOTO 7800
7620 CZ=T-CC
7630 VVC=(Z*STAT(CZ,2)-STAT(CZ,1) 2)/(Z*(Z-1))
7640 CCI = (1.645*(SQR(VVC)))/SQR(Z)
7650 CAVE = STAT(CZ,1)/Z
7660 LWC = CAVE - CCI
7670 UPC = CAVE + CCI
7680 PSC=((CP-CINT(CAVE))/CP)*100
7690 GCA=CINT(CAVE)
7700 IF COMP= 4 GOTO 7800
7710 IF T=EE GOTO 7800
7720 DZ=T-DD
7730 VD=(Z*STAT(DZ,2)-STAT(DZ,1) 2)/(Z*(Z-1))
7740 DCI = (1.645*(SQR(VD)))/SQR(Z)
7750 DAVE = STAT(DZ,1)/Z
7760 LWD = DAVE - DCI
7770 UPD = DAVE + DCI
7780 PSD=((CP-CINT(DAVE))/CP)*100
7790 DCA=CINT(DAVE)
7800 LPRINT USING "***":C;

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7810 LPRINT TAB(8) "A" TAB(13);
7820 LPRINT USING "####";FCA;
7830 LPRINT TAB(24);
7840 LPRINT USING "####.";LWBND;;LPRINT TAB(36);
7850 LPRINT USING "####.";UPBND;;LPRINT TAB(48);
7860 LPRINT USING "####.";SQR(V)/SQR(Z);;LPRINT TAB(60);
7870 LPRINT USING "####.";PSTR
7880 IF T<BB GOTO 8180
7890 LPRINT TAB(8) "B" TAB(13);
7900 LPRINT USING "####";ACA;;LPRINT TAB(24);
7910 LPRINT USING "####.";LWA;;LPRINT TAB(36);
7920 LPRINT USING "####.";UPA;;LPRINT TAB(48);
7930 LPRINT USING "####.";SQR(VA)/SQR(Z);;LPRINT TAB(60);
7940 LPRINT USING "####.";PSA
7950 IF T<CC GOTO 8180
7960 LPRINT TAB(8) "C" TAB(13);
7970 LPRINT USING "####";BCA;;LPRINT TAB(24);
7980 LPRINT USING "####.";LWB;;LPRINT TAB(36);
7990 LPRINT USING "####.";UPB;;LPRINT TAB(48);
8000 LPRINT USING "####.";SQR(VB)/SQR(Z);;LPRINT TAB(60);
8010 LPRINT USING "####.";PSB
8020 IF COMP = 3 GOTO 8180
8030 IF T<DD GOTO 8180
8040 LPRINT TAB(8) "D" TAB(13);
8050 LPRINT USING "####";GCA;;LPRINT TAB(24);
8060 LPRINT USING "####.";LWC;;LPRINT TAB(36);
8070 LPRINT USING "####.";UPC;;LPRINT TAB(48);
8080 LPRINT USING "####.";SQR(VVC)/SQR(Z);;LPRINT TAB(60);
8090 LPRINT USING "####.";PSC
8100 IF COMP=4 GOTO 8180
8110 IF T<EE GOTO 8180
8120 LPRINT TAB(8) "E" TAB(13);
8130 LPRINT USING "####";DCA;;LPRINT TAB(24);
8140 LPRINT USING "####.";LWD;;LPRINT TAB(36);
8150 LPRINT USING "####.";UPD;;LPRINT TAB(48);
8160 LPRINT USING "####.";SQR(VD)/SQR(Z);;LPRINT TAB(60);
8170 LPRINT USING "####.";PSD
8180 IF T<BB GOTO 8210
8190 LPRINT TAB(13) "----";LPRINT TAB(13);
8200 LPRINT USING "####";FCA+ACA+BCA+GCA+DCA
8210 LPRINT
8220 C=C+RP
8230 NEXT T
8240 NEXT Z
8250 LPRINT
8260 LPRINT DATE$,TIME$
8270 GOTO 10830
8280 RUN "LOGO"
8290 END
8300 IF UPOR(D,4)=0 GOTO 8320
8310 IF UPOR(D,4)<MT GOTO 8420
8320 RD=RND
8330 IF RD>RE GOTO 8510
8340 FOR K=0 TO 125
8350 IF POR(K,1)>0 GOTO 8380
8360 POR(K,1)=15:POR(K,2)=AE+1
8370 GOTO 8390
8380 NEXT K
8390 INNUM=INNUM-1
8400 UPOR(D,2)=0

```



```
8410 RETURN
8420 RD=RND
8430 IF RD<RRC GOTO 8510
8440 FOR K=0 TO 125
8450 IF PQR(K,1)>0 GOTO 8480
8460 PQR(K,1)=15:PQR(K,2)=UPQR(D,4)+1
8470 GOTO 8490
8480 NEXT K
8490 INNUM=INNUM-1
8500 GOTO 8520
8510 INNUM=INNUM-1:INLOSS=INLOSS+1
8520 UPQR(D,2)=0
8530 RETURN
8540 VLOSS=VLOSS+1
8550 PQR(J,1)=0
8560 VNUM=VNUM-1
8570 RETURN
8580 IF PQR(J,2)=0 GOTO 8600
8590 IF PQR(J,2)<MT GOTO 8660
8600 RD=RND
8610 IF RD>RE GOTO 8710
8620 PQR(J,2)=AE
8630 PQR(J,1)=15
8640 RNUM=RNUM+1
8650 GOTO 8720
8660 RD=RND
8670 IF RD>REC GOTO 8740
8680 PQR(J,1)=15
8690 RNUM=RNUM+1
8700 GOTO 8720
8710 PQR(J,1)=0
8720 VNUM=VNUM-1
8730 VLOSS=VLOSS+1
8740 RETURN
8750 Y3LOSS=Y3LOSS+1
8760 PQR(J,1)=0
8770 Y3NUM=Y3NUM-1
8780 RETURN
8790 IF PQR(J,2)=0 GOTO 8810
8800 IF PQR(J,2)<MT GOTO 8870
8810 RD=RND
8820 IF RD>RE GOTO 8920
8830 PQR(J,2)=AE
8840 PQR(J,1)=15
8850 RNUM=RNUM+1
8860 GOTO 8930
8870 RD=RND
8880 IF RD>REC GOTO 8950
8890 PQR(J,1)=15
8900 RNUM=RNUM+1
8910 GOTO 8930
8920 PQR(J,1)=0
8930 Y3NUM=Y3NUM-1
8940 Y3LOSS=Y3LOSS+1
8950 RETURN
8960 Y4LOSS=Y4LOSS+1
8970 Y4NUM=Y4NUM-1
8980 PQR(J,1)=0
8990 RETURN
9000 IF PQR(J,2)=0 GOTO 9020
```

```

9010 IF PQR(J,2)<MT GOTO 9080
9020 RD=RND
9030 IF RD>RE GOTO 9130
9040 PQR(J,2)=AE
9050 PQR(J,1)=15
9060 RNUM=RNUM+1
9070 GOTO 9140
9080 RD=RND
9090 IF RD>RC GOTO 9160
9100 PQR(J,1)=15
9110 RNUM=RNUM+1
9120 GOTO 9140
9130 PQR(J,1)=0
9140 Y4NUM=Y4NUM-1
9150 Y4LOSS=Y4LOSS+1
9160 RETURN
9170 J3LOSS=J3LOSS+1
9180 J3NUM=J3NUM-1
9190 PQR(J,1)=0
9200 RETURN
9210 IF PQR(J,2)=0 GOTO 9230
9220 IF PQR(J,2)<MT GOTO 9290
9230 RD=RND
9240 IF RD>RE GOTO 9310
9250 PQR(J,2)=JAE
9260 PQR(J,1)=15
9270 RNUM=RNUM+1
9280 GOTO 9320
9290 RD=RND
9300 IF RD>RC GOTO 9340
9310 PQR(J,1)=0
9320 J3NUM=J3NUM-1
9330 J3LOSS=J3LOSS+1
9340 RETURN
9350 J4LOSS=J4LOSS+1
9360 J4NUM=J4NUM-1
9370 PQR(J,1)=0
9380 RETURN
9390 IF PQR(J,2)=0 GOTO 9410
9400 IF PQR(J,2)<MT GOTO 9470
9410 RD=RND
9420 IF RD>RE GOTO 9490
9430 PQR(J,2)=JAE
9440 PQR(J,1)=15
9450 RNUM=RNUM+1
9460 GOTO 9500
9470 RD=RND
9480 IF RD>RC GOTO 9520
9490 PQR(J,1)=0
9500 J4NUM=J4NUM-1
9510 J4LOSS=J4LOSS+1
9520 RETURN
9530 FOR K=0 TO 75
9540 IF E5(K,1)>0 GOTO 9680
9550 IF PQR(J,1)=1 THEN E5(K,1)=2
9560 IF PQR(J,1)=6 THEN E5(K,1)=2.5
9570 IF PQR(J,1)=2 THEN E5(K,1)=3
9580 IF PQR(J,1)=7 THEN E5(K,1)=3.5
9590 IF PQR(J,1)=3 THEN E5(K,1)=4
9600 IF PQR(J,1)=8 THEN E5(K,1)=4.5

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9610 IF PQR(J,1)=4 THEN E5(K,1)=5
9620 IF PQR(J,1)=9 THEN E5(K,1)=5.5
9630 IF PQR(J,1)=5 THEN E5(K,1)=6
9640 IF PQR(J,1)=10 THEN E5(K,1)=6.5
9650 IF PQR(J,1)=15 THEN E5(K,1)=10
9660 E5(K,2)=PQR(J,2)+1
9670 GOTO 9690
9680 NEXT K
9690 RETURN
9700 FOR K=0 TO 75
9710 IF E5(K,1)>0 GOTO 9750
9720 IF UPQR(D,4)-UPQR(D,2)>12 THEN E5(K,2)=UPQR(D,2) ELSE E5(K,2)=UPQR(D,4)
9730 E5(K,1)=1:E5(K,2)=E5(K,2)+1
9740 GOTO 9760
9750 NEXT K
9760 RETURN
9770 REM REPLACEMENT MODULE
9780 IF VNUM+Y3NUM+Y4NUM+J3NUM+J4NUM+RNUM+INNUM=CP GOTO 10130
9790 IF CP > CPP THEN A=CP ELSE A=CPP
9800 FOR K=0 TO A-1
9810 IF VNUM+Y3NUM+Y4NUM+J3NUM+J4NUM+RNUM+INNUM=CP GOTO 10130
9820 IF PQR(K,1)>0 GOTO 10120
9830 IF VE = 0 GOTO 9910
9840 IF VE = 100 GOTO 9870
9850 RD=RND
9860 IF RD>VV GOTO 10090
9870 PQR(K,1)=6
9880 PQR(K,2)=VT-TT
9890 VNUM=VNUM+1
9900 GOTO 10120
9910 RD=RND
9920 IF RD>TJ GOTO 10030
9930 RD=RND
9940 IF RD>J3Y GOTO 9990
9950 PQR(K,1)=9
9960 IF 36-TT(JET THEN PQR(K,2)=JET ELSE PQR(K,2)=36-TT
9970 J3NUM=J3NUM+1
9980 GOTO 10120
9990 PQR(K,1)=10
10000 IF 48-TT(JET THEN PQR(K,2)=JET ELSE PQR(K,2)=48-TT
10010 J4NUM=J4NUM+1
10020 GOTO 10120
10030 RD=RND
10040 IF RD>YY GOTO 10090
10050 Y3NUM=Y3NUM+1
10060 PQR(K,1)=7
10070 PQR(K,2)=36-TT
10080 GOTO 10120
10090 Y4NUM=Y4NUM + 1
10100 PQR(K,1)=8
10110 PQR(K,2)=48-TT
10120 NEXT K
10130 RETURN
10140 IF E5(K,2)=0 GOTO 10180
10150 IF E5(K,2)<MT THEN 10160 ELSE 10180
10160 E5(K,1)=11
10170 GOTO 10210
10180 RD=RND
10190 IF RD>NPE THEN 10210
10200 E5(K,1)=10:E5(K,2)=NAE

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```

10210 RETURN
10220 E5NUM=E5NUM-1
10230 E5(K,1)=0
10240 E5LOSS=E5LOSS+1
10250 RETURN
10260 IF E6(L,1)=10 GOTO 10310
10270 RD=RND
10280 IF RD>NRE THEN 10310
10290 E6(L,1)=10:E6(L,2)=NAE
10300 GOTO 10340
10310 E6NUM=E6NUM-1
10320 E6(L,1)=0
10330 E6LOSS=E6LOSS+1
10340 RETURN
10350 IF E7(M,1)=10 GOTO 10400
10360 RD=RND
10370 IF RD>NRE THEN 10400
10380 E7(M,1)=10:E7(M,2)=NAE
10390 GOTO 10430
10400 E7NUM=E7NUM-1
10410 E7(M,1)=0
10420 E7LOSS=E7LOSS+1
10430 RETURN
10440 QQ=B/NRP
10450 ST5(QQ)=ST5(QQ)+E5NUM:E5LOSS=0
10460 ST6(QQ)=ST6(QQ)+E6NUM:E6LOSS=0
10470 ST7(QQ)=ST7(QQ)+E7NUM:E7LOSS=0
10480 IF B<NRT GOTO 10820
10490 IF E5NUM=CINT(SE5*E5F) GOTO 10600
10500 FOR A=0 TO 75
10510 IF E5(A,1)>0 GOTO 10590
10520 RD=RND
10530 IF RD>AOT GOTO 10560
10540 E5(A,1)=1:E5(A,2)=LOT
10550 GOTO 10570
10560 E5(A,1)=1:E5(A,2)=EST
10570 E5NUM=E5NUM+1
10580 IF E5NUM=CINT(SE5*E5F) GOTO 10600
10590 NEXT A
10600 IF E6NUM=CINT(SE6*E6F) GOTO 10710
10610 FOR A=0 TO 50
10620 IF E6(A,1)>0 GOTO 10700
10630 RD=RND
10640 IF RD>AOT GOTO 10670
10650 E6(A,1)=1:E6(A,2)=LOT
10660 GOTO 10680
10670 E6(A,1)=1:E6(A,2)=EST
10680 E6NUM=E6NUM+1
10690 IF E6NUM=CINT(SE6*E6F) GOTO 10710
10700 NEXT A
10710 IF E7NUM=CINT(SE7*E7F) GOTO 10820
10720 FOR A=0 TO 30
10730 IF E7(A,1)>0 GOTO 10810
10740 RD=RND
10750 IF RD>AOT GOTO 10780
10760 E7(A,1)=1:E7(A,2)=LOT
10770 GOTO 10790
10780 E7(A,1)=1:E7(A,2)=EST
10790 E7NUM=E7NUM+1
10800 IF E7NUM=CINT(SE7*E7F) GOTO 10820

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10810 NEXT A
10820 RETURN
10830 CLS:BEEP
10840 LPRINT CHR$(12)
10850 PRINT:PRINT:PRINT:PRINT:BEEP
10860 PRINT "YOU CAN CONTINUE THE SESSION AND MAKE MODIFICATIONS TO"
10870 PRINT "ANY OR ALL OF THE INPUT VARIABLES OR CHANGE DATA FILES."
10880 LOCATE 10,10
10890 PRINT "TYPE A *Y* TO CONTINUE THE SESSION OR AN *N* TO END IT."
10900 Y$=INPUT$(1)
10910 IF Y$="Y" OR Y$="y" THEN 10930
10920 IF Y$="N" OR Y$="n" THEN GOTO 15150 ELSE BEEP:GOTO 10880
10930 CLS
10940 LOCATE 10,10
10950 PRINT "DO YOU WANT TO CHANGE ANY OR ALL OF THE VARIABLES OR"
10960 PRINT "CHANGE DATA FILES?"
10970 LOCATE 15,15
10980 PRINT "TYPE A *Y* FOR YES AND AN *N* FOR NO."
10990 Y$=INPUT$(1)
11000 IF Y$="Y" OR Y$="y" THEN 11020
11010 IF Y$="N" OR Y$="n" THEN 14250 ELSE BEEP:GOTO 10950
11020 CLS:LOCATE 10,10
11030 PRINT "TYPE *V* TO CHANGE INDIVIDUAL VARIABLES "
11040 LOCATE 12,10
11050 PRINT "OR *D* TO CHANGE THE DATA FILE FOR ALL INPUT VARIABLES"
11060 Y$=INPUT$(1)
11070 IF Y$="V" OR Y$="v" THEN 11110
11080 IF Y$="D" OR Y$="d" THEN 11090 ELSE BEEP:GOTO 11030
11090 LOCATE 15,10:LINE INPUT "ENTER THE NAME OF THE DATA FILE ";DF$
11100 GOTO 370
11110 CLS
11120 PRINT "A--ENTER THE TOTAL 1ST TERMERS IN THE UNIT-- "CP
11130 PRINT "                EXPECTED PERCENT OF FILE-- "EF
11140 CPP=CINT((EF*.01)*CP)
11150 PRINT "B--ENTER THE EXPECTED PERCENTAGE OF VEL SOLDIERS--"VE
11160 VV=VE*.01:VEL=CINT(CP*VV)
11170 PRINT "C--ENTER THE LENGTH OF A VEL CONTRACT IN MONTHS--"VT
11180 PRINT "D--ENTER THE TOTAL PERCENTAGE OF SOLDIERS EXPECTED FOR JET--"JE
11190 TJ=JE*.01:PJ=CINT(CP*TJ)
11200 PRINT "E--ENTER THE PERCENTAGE EXPECTED FOR 3 YR JET ENLISTMENTS--"J33
11210 J3Y=J33*.01:J3=CINT(J3Y*PJ):J4=PJ-J3:J44=100-J33
11220 PRINT "                REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR JET ENLISTEES--"J44
11230 PRINT "F--ENTER THE TOUR LENGTH FOR JET SOLDIERS IN MONTHS--"JET
11240 PRINT "G--ENTER THE PERCENTAGE OF SOLDIERS THAT ARE EXPECTED TO"
11250 PRINT "                EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT"
11260 PRINT "                JET SOLDIERS -----"CA
11270 PRINT "                UNACCOMPANIED SOLDIERS -----"CCA
11280 PRINT "                MINIMUM TIME REQUIRED TO ROTATE TO CONUS---"MT
11290 REC=CCA*.01
11300 RC=CA*.01
11310 PRINT "H--ENTER THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS--"Y3
11320 YY=Y3*.01
11330 YR3=CINT((CP-VEL-PJ)*YY)
11340 YR4=CP-VEL-YR3-PJ
11350 Y4=100-Y3
11360 PRINT "                REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR ENLISTEES--"Y4
11370 PRINT "I--ENTER THE TOUR FOR UNACCOMPANIED SOLDIERS IN MONTHS--"ST
11380 PRINT "J--ENTER THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
11390 PRINT "                THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT--"TT
11400 PRINT "*** IF YOU WISH TO DISCONTINUE THE SESSION, PRESS ENTER. ***"

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11410 PRINT
11420 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
11430 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
11440 PRINT "THE CHANGES TO THIS DATA, TYPE IN AN * X * TO CONTINUE."
11450 V$=INPUT$(1)
11460 PRINT
11470 IF V$="X" OR V$="x" THEN 11660
11480 IF V$="A" OR V$="a" THEN 11600
11490 IF V$="B" OR V$="b" THEN 11630
11500 IF V$="C" OR V$="c" THEN 11650
11510 IF V$="D" OR V$="d" THEN 11670
11520 IF V$="E" OR V$="e" THEN 11690
11530 IF V$="F" OR V$="f" THEN 11710
11540 IF V$="G" OR V$="g" THEN 11730
11550 IF V$="H" OR V$="h" THEN 11790
11560 IF V$="I" OR V$="i" THEN 11810
11570 IF V$="J" OR V$="j" THEN 11830
11580 IF V$>"J" OR V$>"j" THEN 11020
11590 IF V$>" " THEN 11510
11600 INPUT "A--ENTER THE TOTAL 1ST TERMERS IN THE UNIT ";CP
11610 INPUT "                EXPECTED PERCENT OF FILL ";EF
11620 GOTO 11110
11630 INPUT "B--ENTER THE EXPECTED PERCENTAGE OF VEL SOLDIERS--";VE
11640 GOTO 11110
11650 INPUT "C--ENTER THE LENGTH OF A VEL CONTRACT IN MONTHS--";VT
11660 GOTO 11110
11670 INPUT "D--ENTER THE TOTAL PERCENTAGE OF SOLDIERS EXPECTED FOR JET";JE
11680 GOTO 11110
11690 INPUT "E--ENTER THE PERCENTAGE EXPECTED FOR 3 YR JET ENLISTMENTS";J33
11700 GOTO 11110
11710 INPUT "F--ENTER THE TOUR LENGTH FOR JET SOLDIERS IN MONTHS";JET
11720 GOTO 11110
11730 PRINT "G--ENTER THE PERCENTAGE OF SOLDIERS THAT ARE EXPECTED TO"
11740 PRINT "    EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT"
11750 INPUT "                JET SOLDIERS -----";CA
11760 INPUT "                UNACCOMPANIED SOLDIERS ----";CCA
11770 INPUT "                MINIMUM TIME REQUIRED TO ROTATE TO CONUS----";MT
11780 GOTO 11110
11790 INPUT "H--ENTER THE EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS--";Y3
11800 GOTO 11110
11810 INPUT "I--ENTER THE TOUR FOR UNACCOMPANIED SOLDIERS IN MONTHS";ST
11820 GOTO 11110
11830 PRINT "J--ENTER THE EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
11840 INPUT "    THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT";TT
11850 GOTO 11110
11860 CLS:PRINT
11870 IF A$="N" OR A$="n" THEN B$="NO"
11880 IF A$="Y" OR A$="y" THEN B$="YES"
11890 IF BN$="N" OR BN$="n" THEN BBN$="NO"
11900 IF BN$="Y" OR BN$="y" THEN BBN$="YES"
11910 PRINT "ENTER THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
11920 PRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
11930 PRINT "    K--UNACCOMPANIED 1st TERMERS---"REE
11940 PRINT "    L--ENTER THE AVERAGE LENGTH IN MONTHS---"AE
11950 PRINT "    M--JET SOLDIERS---"JREE
11960 PRINT "    N--ENTER THE AVERAGE LENGTH IN MONTHS---"JAE
11970 JRE=JREE*.01
11980 RE=REE*.01
11990 PRINT "O--ENTER THE EXPECTED PROMOTION MONTH TO E5--"PT
12000 PRINT "P--ENTER THE EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5--"PPP

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12010 PP=PPP*.01
12020 PRINT "Q--ENTER THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT--"ARR
12030 AR=ARR*.01
12040 PRINT "R--ENTER THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS--"RP
12050 PRINT "S--ENTER THE NUMBER OF MONTHS TO SIMULATE--"MO
12060 PRINT "T--HOW MANY REPETITIONS--"REPS
12070 PRINT "U--DO YOU WANT A MONTHLY LISTING OF UNIT STRENGTH-- "B$
12080 PRINT "V--DO YOU WANT BATTALION TOTALS FOR REPLACEMENTS-- "BBN$
12090 IF B$ = "N" OR B$ = "n" THEN 12110
12100 PRINT "COMPANIES IN THE BATTALION IS-- "COMP
12110 PRINT
12120 PRINT "YOU MAY CHANGE ANY OR ALL OF THE VARIABLES. ENTER THE LETTER OF"
12130 PRINT "THE VARIABLE YOU WANT TO CHANGE. WHEN YOU HAVE FINISHED MAKING"
12140 PRINT "THE CHANGES TYPE IN AN * X *."
12150 PRINT
12160 PRINT
12170 Z$=INPUT$(1)
12180 IF Z$="X" OR Z$="x" THEN 12590
12190 IF Z$="K" OR Z$="k" THEN 12330
12200 IF Z$="L" OR Z$="l" THEN 12340
12210 IF Z$="M" OR Z$="m" THEN 12350
12220 IF Z$="N" OR Z$="n" THEN 12360
12230 IF Z$="O" OR Z$="o" THEN 12370
12240 IF Z$="P" OR Z$="p" THEN 12380
12250 IF Z$="Q" OR Z$="q" THEN 12390
12260 IF Z$="R" OR Z$="r" THEN 12410
12270 IF Z$="S" OR Z$="s" THEN 12420
12280 IF Z$="T" OR Z$="t" THEN 12430
12290 IF Z$="U" OR Z$="u" THEN 12440
12300 IF Z$="V" OR Z$="v" THEN 12500 ELSE BEEP:GOTO 11860
12310 IF Z$>"V" OR Z$>"v" THEN 11860
12320 IF Z$>" " THEN 11860
12330 INPUT "K--UNACCOMPANIED 1st TERMERS";REE:GOTO 11860
12340 INPUT "L--ENTER THE AVERAGE LENGTH IN MONTHS";AE:GOTO 11860
12350 INPUT "M--JET SOLDIERS";JREE:GOTO 11860
12360 INPUT "N--ENTER THE AVERAGE LENGTH IN MONTHS";JAE:GOTO 11860
12370 INPUT "O--ENTER THE EXPECTED PROMOTION MONTH TO E5";PT:GOTO 11860
12380 INPUT "F--ENTER THE EXPECTED MONTHLY PROMOTION % TO E5";PPP:GOTO 11860
12390 INPUT "Q--ENTER THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT";ARR
12400 GOTO 11860
12410 INPUT "R--ENTER THE INTERVAL FOR 1ST TERMER REPLACEMENTS";RP:GOTO 11860
12420 INPUT "S--ENTER THE NUMBER OF MONTHS TO SIMULATE";MO:GOTO 11860
12430 INPUT "T--HOW MANY REPETITIONS";REPS:GOTO 11860
12440 PRINT "U--DO YOU WANT A MONTHLY LISTING OF UNIT STRENGTH"
12450 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
12460 A$=INPUT$(1)
12470 IF A$ = "N" OR A$ = "n" THEN 12490
12480 IF A$ = "Y" OR A$ = "y" THEN 12490 ELSE BEEP:GOTO 12440
12490 GOTO 11860
12500 PRINT "DO YOU WANT BATTALION TOTALS FOR REPLACEMENTS ?"
12510 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
12520 B$ = INPUT$(1)
12530 IF B$ = "N" OR B$ = "n" THEN 11860
12540 IF B$ = "Y" OR B$ = "y" THEN 12550 ELSE BEEP:GOTO 12500
12550 PRINT "ENTER THE NUMBER OF COMPANIES IN THE BATTALION."
12560 INPUT "ENTER EITHER 3, 4, OR 5";COMP
12570 IF COMP<3 OR COMP>5 GOTO 12560
12580 GOTO 11860
12590 IF CF$="e" OR CF$="E" THEN 12670
12600 CLS:PRINT "DO YOU WANT TO INPUT OR CHANGE NCO DATA?"

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12610 LOCATE 15,15
12620 PRINT "ENTER ** Y ** FOR YES,** N ** FOR NO."
12630 IIN$ = INPUT$(1)
12640 IF IIN$="N" OR IIN$="n" THEN 13860
12650 IF IIN$ = "Y" OR IIN$ = "y" THEN 12660 ELSE BEEP:GOTO 12690
12660 IF IIN$="N" OR IIN$="n" AND IIN$="Y" OR IIN$="y" THEN IIN$="Y"
12670 CLS:PRINT "NCC DATA *****"
12680 PRINT
12690 PRINT "A---ENTER THE NUMBER OF AUTHORIZED E5s---"SE5
12700 PRINT "B---ENTER THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS---"E5T
12710 PRINT "C---ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s---"AR55
12720 AR5=AR55*.01
12730 PRINT "D---ENTER THE EXPECTED MONTHLY PROMOTION % OF E5s TO E6---"E5PP
12740 E5P=E5PP*.01
12750 PRINT "E---ENTER THE NUMBER OF AUTHORIZED E6s---"SE6
12760 PRINT "F---ENTER THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS---"E6T
12770 PRINT "G---ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s---"AR66
12780 AR6=AR66*.01
12790 PRINT "H---ENTER THE EXPECTED MONTHLY PROMOTION % OF E6s TO E7---"E6PP
12800 E6P=E6PP*.01
12810 PRINT "I---ENTER THE NUMBER OF AUTHORIZED E7s---"SE7
12820 PRINT "J---ENTER THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS---"E7T
12830 PRINT "K---ENTER THE EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s---"AR77
12840 AR7=AR77*.01
12850 PRINT "L---ENTER THE EXPECTED MONTHLY PROMOTION % OF E7s TO E8---"E7PP
12860 E7P=E7PP*.01
12870 PRINT:PRINT
12880 PRINT "WHEN YOU HAVE FINISHED MAKING THE CHANGES TYPE IN AN * X *."
12890 P$=INPUT$(1)
12900 PRINT:IF SE5>0 THEN IIN$="Y"
12910 IF P$="X" OR P$="x" THEN 13210
12920 IF P$="A" OR P$="a" THEN 13060
12930 IF P$="B" OR P$="b" THEN 13070
12940 IF P$="C" OR P$="c" THEN 13080
12950 IF P$="D" OR P$="d" THEN 13090
12960 IF P$="E" OR P$="e" THEN 13110
12970 IF P$="F" OR P$="f" THEN 13120
12980 IF P$="G" OR P$="g" THEN 13130
12990 IF P$="H" OR P$="h" THEN 13140
13000 IF P$="I" OR P$="i" THEN 13160
13010 IF P$="J" OR P$="j" THEN 13170
13020 IF P$="K" OR P$="k" THEN 13180
13030 IF P$="L" OR P$="l" THEN 13190
13040 IF P$>"L" OR P$>"l" THEN 12670
13050 IF P$>" " THEN 12670
13060 INPUT "ENTER THE NUMBER OF AUTHORIZED E5s";SE5:GOTO 12670
13070 INPUT "ENTER EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS";E5T:GOTO 12670
13080 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E5s";AR55:GOTO 12670
13090 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION % OF E5s TO E6";E5PP
13100 GOTO 12670
13110 INPUT "ENTER THE NUMBER OF AUTHORIZED E6s";SE6:GOTO 12670
13120 INPUT "ENTER EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS";E6T:GOTO 12670
13130 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E6s";AR66:GOTO 12670
13140 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION % OF E6s TO E7";E6PP
13150 GOTO 12670
13160 INPUT "ENTER THE NUMBER OF AUTHORIZED E7s";SE7:GOTO 12670
13170 INPUT "ENTER EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS";E7T:GOTO 12670
13180 INPUT "ENTER THE EXPECTED MONTHLY % OF ATTRITION FOR E7s";AR77:GOTO 12670
13190 INPUT "ENTER THE EXPECTED MONTHLY PROMOTION % OF E7s TO E8";E7PP
13200 GOTO 12670

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13210 CLS:PRINT "NCO DATA *****"
13220 PRINT
13230 PRINT "M--ENTER THE EXPECTED PERCENTAGE OF NCOs THAT WILL CHOOSE AN"
13240 PRINT "  ALL OTHERS TOUR RATHER THAN AN ACCOMPANIED TOUR-----"AOTT
13250 AOT = AOTT*.01
13260 PRINT "N--ENTER THE LENGTH OF AN ALL OTHERS TOUR-----"LOT
13270 PRINT "O--ENTER THE EXPECTED PERCENT OF INITIAL NCO FILL--"NFF:NFF=NFF*.01
13280 SSE5=CINT(SE5*NF):SSE6=CINT(SE6*NF):SSE7=CINT(SE7*NF)
13290 SE50=CINT(AOT*SSE5)
13300 SE5A=SSE5-SE50
13310 SE60=CINT(AOT*SSE6)
13320 SE6A=SSE6-SE60
13330 SE70=CINT(AOT*SSE7)
13340 SE7A=SSE7-SE70
13350 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
13360 PRINT "LIFETIME FOR:"
13370 PRINT "      P-- E5s --"E5FF:E5F=E5FF*.01
13380 PRINT "      Q-- E6s --"E6FF:E6F=E6FF*.01
13390 PRINT "      R-- E7s --"E7FF:E7F=E7FF*.01
13400 PRINT "ENTER THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
13410 PRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
13420 PRINT "      S--ENTER THE EXPECTED PERCENT OF NCO EXTENSIONS----"NREE
13430 PRINT "      T--ENTER THE AVERAGE LENGTH IN MONTHS----"NAE
13440 NRE=NREE*.01
13450 PRINT "U--ENTER THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS----"NRP
13460 PRINT "V--ENTER THE MONTH TO START NCO REPLACEMENTS----"NRT
13470 PRINT:PRINT
13480 PRINT "WHEN YOU HAVE FINISHED MAKING THE CHANGES TYPE IN AN * X *."
13490 P$=INPUT$(1)
13500 PRINT
13510 IF P$="X" OR P$="x" THEN 13850
13520 IF P$="M" OR P$="m" THEN 13650
13530 IF P$="N" OR P$="n" THEN 13680
13540 IF P$="O" OR P$="o" THEN 13700
13550 IF P$="P" OR P$="p" THEN 13720
13560 IF P$="Q" OR P$="q" THEN 13750
13570 IF P$="R" OR P$="r" THEN 13780
13580 IF P$="S" OR P$="s" THEN 13810
13590 IF P$="T" OR P$="t" THEN 13820
13600 IF P$="U" OR P$="u" THEN 13830
13610 IF P$="V" OR P$="v" THEN 13840
13620 IF P$>"V" OR P$>"v" THEN 13210
13630 IF P$<"M" OR P$<"m" THEN 13210
13640 IF P$="" THEN 13210
13650 PRINT "ENTER THE EXPECTED PERCENTAGE OF NCOs THAT WILL CHOOSE AN"
13660 INPUT "ALL OTHERS TOUR RATHER THAN AN ACCOMPANIED TOUR-----";AOTT
13670 GOTO 13210
13680 INPUT "ENTER THE LENGTH OF AN ALL OTHERS TOUR-----";LOT
13690 GOTO 13210
13700 INPUT "ENTER THE EXPECTED PERCENT OF INITIAL NCO FILL";NFF
13710 GOTO 13210
13720 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
13730 PRINT "LIFETIME FOR:"
13740 INPUT "      E5s      ";E5FF:E5F=E5FF*.01:GOTO 13210
13750 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
13760 PRINT "LIFETIME FOR:"
13770 INPUT "      E6s      ";E6FF:E6F=E6FF*.01:GOTO 13210
13780 PRINT "ENTER THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
13790 PRINT "LIFETIME FOR:"
13800 INPUT "      E7s      ";E7FF:E7F=E7FF*.01:GOTO 13210

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13810 INPUT "ENTER THE EXPECTED PERCENT OF NCO EXTENSIONS";NREE:GOTO 13210
13820 INPUT "ENTER THE AVERAGE LENGTH IN MONTHS";NAE:GOTO 13210
13830 INPUT "ENTER THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS";NRP:GOTO 13210
13840 INPUT "ENTER THE MONTH TO START NCO REPLACEMENTS";NRT:GOTO 13210
13850 IF IN$="n" OR IN$="N" THEN 13860 ELSE CLS:IF NRP=0 GOTO 13830
13860 CLS:LOCATE 10,10
13870 IF F$="N" OR F$="n" OR F$="" GOTO 13900
13880 PRINT "CURRENT UNIT FILE THAT HAS BEEN INPUTED IS  "FF$"."
13890 GOTO 13930
13900 PRINT "DO YOU WANT TO INPUT A FILE FOR A UNIT---Y= FOR YES =N= FOR NO."
13910 CCH$=INPUT$(1):IF CCH$="Y" OR CCH$="y" THEN F$="Y" :GOTO 14030
13920 IF CCH$="N" OR CCH$="n" THEN 14000 ELSE 13860
13930 LOCATE 15,15
13940 PRINT "ENTER * Y * TO USE THIS FILE OR * N * TO CHANGE/DELETE THE FILE."
13950 CH$=INPUT$(1):IF CH$="Y" OR CH$="y" GOTO 14180
13960 IF CH$="N" OR CH$="n" THEN 13970 ELSE 13860
13970 CLS:PRINT "ENTER * Y * TO INPUT A NEW FILE OR * N * FOR NO FILE."
13980 F1$=INPUT$(1)
13990 IF F1$="n" OR F1$="N" THEN 14000 ELSE 14020
14000 F$="N"
14010 GOTO 14060
14020 IF F1$="Y" OR F1$="y" THEN 14030 ELSE 13970
14030 PRINT:PRINT:LINE INPUT "ENTER THE NAME OF THE NEW UNIT INPUT FILE  ";FF$
14040 IF FF$="" THEN BEEP : GOTO 14030
14050 F$="Y"
14060 IF F$="N" THEN RT=12 ELSE RT=0
14070 IF CF$="n" OR CF$="N" THEN GOSUB 15780 ELSE 14090
14080 CF$="e":GOTO 14180
14090 CLS:LOCATE 10,10
14100 PRINT "THE EXISTING FILE IS "DF$ ". DO YOU WANT TO SAVE ANY CHANGES "
14110 PRINT "TO A NEW FILE ?"
14120 LOCATE 15,15:PRINT "ENTER *S* TO SAVE OR *C* TO CONTINUE."
14130 SS$=INPUT$(1):IF SS$="c" OR SS$="C" THEN 14180 ELSE 14140
14140 IF SS$="S" OR SS$="s" THEN 14150 ELSE 14090
14150 CLS:LOCATE 10,10:LINE INPUT "ENTER THE NEW FILE NAME ";DF$
14160 IF DF$="" GOTO 14150
14170 GOSUB 15780
14180 CLS:LOCATE 10,10
14190 PRINT "PRINTING INPUT DATA, PLEASE STAND BY."
14200 LPRINT DATE$,TIME$
14210 LPRINT
14220 LPRINT "USAEUR ---- "UD$
14230 LPRINT "*****"
14240 LPRINT
14250 LPRINT "THE OUTPUT WAS DERIVED FROM THE INPUT DATA LISTED BELOW."
14260 LPRINT
14270 IF F$="n" OR F$="N" GOTO 14390
14280 LPRINT "CURRENT UNIT FILE THAT HAS BEEN INPUTED IS  "FF$"."
14290 OPEN "I",#1,FF$
14300 INPUT #1,FT
14310 INPUT #1,F5
14320 INPUT #1,F6
14330 INPUT #1,F7
14340 LPRINT "          UNIT PROFILE IS -----  E1 - E4  -- "FT
14350 LPRINT "                                     E5s -- "F5
14360 LPRINT "                                     E6s, -- "F6
14370 LPRINT "                                     E7s -- "F7
14380 LPRINT
14390 LPRINT "A--TOTAL 1ST TERMERS IN THE UNIT----- "CP
14400 LPRINT "          EXPECTED PERCENT OF FILL-- "EF

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14410 LPRINT "B--EXPECTED PERCENTAGE OF VEL SOLDIERS---- "VE
14420 LPRINT "C--EXPECTED LENGTH OF A VEL CONTRACT IN MONTHS---- "VT
14430 LPRINT "D--THE TOTAL PERCENTAGE OF SOLDIERS EXPECTED FOR JET--"JE
14440 LPRINT "E--THE PERCENTAGE EXPECTED FOR 3 YR JET ENLISTMENTS--"J33
14450 LPRINT "      REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR JET ENLISTEES--"J44
14460 LPRINT "F--THE TOUR LENGTH FOR JET SOLDIERS IN MONTHS----"JET
14470 LPRINT "G--THE PERCENTAGE OF SOLDIERS THAT ARE EXPECTED TO"
14480 LPRINT "      EXTEND THEIR ENLISTMENT FOR A CONUS ASSIGNMENT"
14490 LPRINT "      JET SOLDIERS -----"CA
14500 LPRINT "      UNACCOMPANIED SOLDIERS -----"CCA
14510 LPRINT "H--EXPECTED PERCENTAGE OF 3 YR ENLISTMENTS---- "Y3
14520 LPRINT "      REMAINING SOLDIERS ARE ASSUMED TO BE 4 YR ENLISTEES--"Y4
14530 LPRINT "I--THE TOUR FOR UNACCOMPANIED SOLDIERS IN MONTHS----"ST
14540 LPRINT "J--EXPECTED TRAINING, LEAVE AND TRAVEL TIME IN MONTHS"
14550 LPRINT "      THAT A SOLDIER WILL HAVE BEFORE ARRIVING AT HIS UNIT--"TT
14560 LPRINT "THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
14570 LPRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
14580 LPRINT "      K--UNACCOMPANIED 1st TERMERS---"REE
14590 LPRINT "      L--THE AVERAGE LENGTH IN MONTHS---"AE
14600 LPRINT "      M--JET SOLDIERS---"JREE
14610 LPRINT "      N--THE AVERAGE LENGTH IN MONTHS---"JAE
14620 LPRINT "O--EXPECTED PROMOTION MONTH TO E5----- "PT
14630 LPRINT "P--EXPECTED MONTHLY PROMOTION PERCENTAGE TO E5----- "PPP
14640 LPRINT "Q--THE EXPECTED MONTHLY ATTRITION RATE IN PERCENT----- "ARR
14650 LPRINT "R--THE INTERVAL FOR 1ST TERMER REPLACEMENTS, IN MONTHS----- "RP
14660 LPRINT "S--THE NUMBER OF MONTHS SIMULATED----- "MO
14670 LPRINT "T--THE NUMBER OF REPETITIONS----- "REPS
14680 LPRINT "U--MONTHLY LISTING OF UNIT STRENGTH-- "B#
14690 LPRINT "V--BATTALION TOTALS FOR REPLACEMENTS-- "BBN#
14700 IF B# = "N" OR B# = "n" THEN 14720
14710 LPRINT "      COMPANIES IN THE BATTALION IS-- "COMP
14720 IF IN# = "N" OR IN# = "n" THEN 15030
14730 LPRINT
14740 LPRINT "NCO DATA *****:***":LPRINT
14750 LPRINT "A--NUMBER OF AUTHORIZED E5s---"SE5
14760 LPRINT "B--THE EXPECTED TOUR LENGTH FOR AN E5, IN MONTHS---"E5T
14770 LPRINT "C--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E5s---"AR55
14780 LPRINT "D--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E5s TO E6---"E5PP
14790 LPRINT "E--NUMBER OF AUTHORIZED E6s---"SE6
14800 LPRINT "F--THE EXPECTED TOUR LENGTH FOR AN E6, IN MONTHS---"E6T
14810 LPRINT "G--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E6s---"AR66
14820 LPRINT "H--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E6s TO E7---"E6PP
14830 LPRINT "I--NUMBER OF AUTHORIZED E7s---"SE7
14840 LPRINT "J--THE EXPECTED TOUR LENGTH FOR AN E7, IN MONTHS---"E7T
14850 LPRINT "K--EXPECTED MONTHLY PERCENT OF ATTRITION FOR E7s---"AR77
14860 LPRINT "L--THE EXPECTED MONTHLY PROMOTION PERCENTAGE OF E7s TO E8---"E7PP
14870 LPRINT "M--THE EXPECTED PERCENTAGE OF NCOs THAT WILL CHOOSE AN"
14880 LPRINT "      ALL OTHERS TOUR RATHER THAN AN ACCOMPANIED TOUR-----"AOTT
14890 LPRINT "N--THE LENGTH OF AN ALL OTHERS TOUR----"LOT
14900 LPRINT "O--THE EXPECTED PERCENT OF INITIAL NCO FILL-- "NFF
14910 LPRINT "THE EXPECTED PERCENT OF FILL FOR NCOs DURING THE UNIT'S "
14920 LPRINT "LIFETIME FOR:"
14930 LPRINT "      P-- E5s ---"E5FF
14940 LPRINT "      Q-- E6s ---"E6FF
14950 LPRINT "      R-- E7s ---"E7FF
14960 LPRINT "THE PERCENTAGE OF EXPECTED EXTENSIONS AND REUPS FOR PDA"
14970 LPRINT "AND THE AVERAGE EXTENSION LENGTH IN MONTHS OF THE TOUR FOR:"
14980 LPRINT "      S--THE EXPECTED PERCENT OF NCO EXTENSIONS-- "NREE
14990 LPRINT "      T--THE AVERAGE LENGTH IN MONTHS-- "NAE
15000 NRE=NREE*.01

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15010 LPRINT "U---THE INTERVAL FOR NCO REPLACEMENTS, IN MONTHS---"NRP
15020 LPRINT "V---THE MONTH TO START NCO REPLACEMENTS---"NRT
15030 LPRINT CHR$(12)
15040 IF CF$="N" OR CF$="n" THEN GOSUB 15780 ELSE 15050
15050 LPRINT SPC(10)"COMPANY FIRST TERMER COHORT REPLACEMENT PACKAGES"
15060 LPRINT SPC(10)"-----"
15070 LPRINT
15080 LPRINT " ", " AVG      90% CONFIDENCE INTERVAL"
15090 LPRINT "MONTH      PKG SIZE  LOWER BOUNDS UPPER BOUNDS  STD DEV";
15100 LPRINT "      % UNIT STR"
15110 LPRINT
15120 ERASE PQR,STAT,MON,E6,E7,E58,E68,E7S,ST5,ST6,ST7
15130 REM ERASE STAT,MON,E58,E6S,E7S,ST6,ST6,ST7
15140 GOTO 2330
15150 LOCATE 5,5:BEEP
15160 CLS
15170 PRINT "ARE YOU SURE ????????"
15180 LOCATE 10,10
15190 PRINT "YOU WILL HAVE TO INPUT ALL NEW DATA TO START AGAIN."
15200 PRINT
15210 PRINT "IF YOU STILL WISH TO END THE SESSION,PRESS ** Y **."
15220 PRINT
15230 PRINT "IF YOU WISH TO CONTINUE, PRESS ** N **."
15240 D$=INPUT$(1):IF D$="N" OR D$="n" THEN 10930
15250 IF D$="Y" OR D$="y" THEN 8280 ELSE 15150
15260 OPEN "I",#2,D$
15270 INPUT #2,CP
15280 INPUT #2,EF
15290 INPUT #2,VE
15300 INPUT #2,VT
15310 INPUT #2,JE
15320 INPUT #2,J33
15330 INPUT #2,JET
15340 INPUT #2,CA
15350 INPUT #2,CCA
15360 INPUT #2,Y3
15370 INPUT #2,ST
15380 INPUT #2,TT
15390 INPUT #2,REE
15400 INPUT #2,AE
15410 INPUT #2,JREE
15420 INPUT #2,JAE
15430 INPUT #2,PT
15440 INPUT #2,PPP
15450 INPUT #2,ARR
15460 INPUT #2,RP
15470 INPUT #2,MO
15480 INPUT #2,REPS
15490 INPUT #2,A$
15500 INPUT #2,BN$
15510 INPUT #2,COMP
15520 INPUT #2,IN$
15530 INPUT #2,SE5
15540 INPUT #2,E5T
15550 INPUT #2,AR55
15560 INPUT #2,E5PP
15570 INPUT #2,SE6
15580 INPUT #2,E6T
15590 INPUT #2,AR66
15600 INPUT #2,E6PP

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15610 INPUT #2,SE7
15620 INPUT #2,E7T
15630 INPUT #2,AR77
15640 INPUT #2,E7PP
15650 INPUT #2,AOTT
15660 INPUT #2,LOT
15670 INPUT #2,NFF
15680 INPUT #2,E5FF
15690 INPUT #2,E6FF
15700 INPUT #2,E7FF
15710 INPUT #2,NREE
15720 INPUT #2,NAE
15730 INPUT #2,NRP
15740 INPUT #2,NRT
15750 INPUT #2,MT
15760 CLOSE
15770 RETURN
15780 OPEN DF: FOR OUTPUT AS #2
15790 PRINT #2,CP
15800 PRINT #2,EF
15810 PRINT #2,VE
15820 PRINT #2,VT
15830 PRINT #2,JE
15840 PRINT #2,J33
15850 PRINT #2,JET
15860 PRINT #2,CA
15870 PRINT #2,CCA
15880 PRINT #2,Y3
15890 PRINT #2,ST
15900 PRINT #2,TT
15910 PRINT #2,REE
15920 PRINT #2,AE
15930 PRINT #2,JREE
15940 PRINT #2,JAE
15950 PRINT #2,PT
15960 PRINT #2,PPP
15970 PRINT #2,ARR
15980 PRINT #2,RP
15990 PRINT #2,MO
16000 PRINT #2,REPS
16010 PRINT #2,A:
16020 PRINT #2,BN:
16030 PRINT #2,COMP
16040 PRINT #2,IN:
16050 PRINT #2,SE5
16060 PRINT #2,E5T
16070 PRINT #2,AR55
16080 PRINT #2,E5PP
16090 PRINT #2,SE6
16100 PRINT #2,E6T
16110 PRINT #2,AR66
16120 PRINT #2,E6PP
16130 PRINT #2,SE7
16140 PRINT #2,E7T
16150 PRINT #2,AR77
16160 PRINT #2,E7PP
16170 PRINT #2,AOTT
16180 PRINT #2,LOT
16190 PRINT #2,NFF
16200 PRINT #2,E5FF
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16210 PRINT #2,E6FF
16220 PRINT #2,E7FF
16230 PRINT #2,NBEE
16240 PRINT #2,NAE
16250 PRINT #2,NBP
16260 PRINT #2,NRT
16270 PRINT #2,MT
16280 CLOSE
16290 RETURN
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GLOSSARY**1. ABBREVIATIONS, ACRONYMS, AND SHORT TERMS**

| | |
|-----------|----------------------------------|
| C-REM | COHORT Replacement Model |
| ETS | expiration term of service |
| IET | initial entry training |
| IRS | Individual Replacement System |
| JET | Junior Enlistment Trainee |
| MILPERCEN | Military Personnel Center |
| NMS | New Manning System |
| PCS | permanent change of station |
| PDA | present duty assignment |
| PFAM | Personnel Flow Assessment Model |
| PRI | personnel readiness indicator(s) |
| TOS | time on station |
| UMS | Unit Manning System |
| URSA | Unit Replacement System Analysis |
| VEL | variable enlistment length |

2. DEFINITIONS

| | |
|--------------------|--|
| all-others tour | For purposes of this study, an OCONUS long-tour assignment served by SM with dependents who chose not to be accompanied by his/her dependents. The all-others tour length is 24 months. |
| careerist | An enlisted soldier who has continuous service beyond his initial enlistment period resulting from one or more reenlistments. |
| COHORT | An acronym for cohesion, operational readiness, and training. Describes a management concept in which soldiers and leaders are assigned to, and stabilized within, battalion or company-sized combat arms units for fixed periods of time. |

| | |
|-------------------------------------|--|
| COHORT package | A group of first-termers trained together in IET and assigned to a COHORT unit. |
| COHORT unit | A combat arms unit (company/battery or battalion) composed of COHORT packages and careerists who will be stabilized for a fixed life cycle of the unit. The unit trains together and usually will deploy overseas at a fixed time in the unit life cycle. |
| COHORT unit life cycle | The duration of time a COHORT unit exists for stabilization and retention of its personnel; usually consists of a CONUS and an OCONUS phase. |
| first-termers | Those soldiers who have not yet completed their first enlistment period. In PFAM, an enlisted soldier serving in grade E3 or E4. |
| Individual Replacement System (IRS) | The personnel management system currently used to fill Army-wide requirements, defined at the grade and MOS level of detail, by individually selecting soldiers from the Army at large to fill personnel vacancies on a singular basis, i.e., one soldier leaves an assignment and is replaced by another soldier. |
| long tour | For purposes of this study, an assignment to an OCONUS theater for which the standard tour length is 36 months for SM accompanied by their dependents and for single SM. The tour length is 24 months for all others. |
| regiment | A grouping of like-type CONUS and OCONUS battalions with the same regimental designation formed for the purpose of allowing recurring assignments over the length of a soldier's career. |
| regimental system | An Army-wide system under which the battalions of each combat arms branch are organized into regiments. |
| short tour | For purposes of this study, an assignment to an OCONUS theater for which the standard tour length is 12 months for all SM. |
| steady state | The eventual condition which occurs, and can be sustained, after the start-up or transition phase is complete. |
| turnover rate | As defined in AR 220-1, the sum of a unit's last 3 months' losses divided by its current operating strength. |